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Technical English

Second Edition

(As Per Latest Syllabus of Anna University Coimbatore Region Semester I)

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Preface

The second edition of *Technical English* is designed as a textbook for first year students of Engineering, Science and Technology. It covers the syllabi requirements of most universities and has its focus on the essentials of English Grammar, Usage and Composition.

A major part of the book deals with fundamentals of grammar. It contains copious illustrative examples and specimens of all types of functional grammar and correct usage. Every attempt has been made to make the study of Grammar appealing and interesting.

All the important branches of English composition have been fully covered. The numerous exercises given are intended to provoke students' thought and develop their creativity.

The book covers all the major forms of writing useful in real life. Each unit contains a model and a detailed analysis which highlights the characteristic features and the sub-skills involved in that particular kind of writing. Such detailed analysis of the model will be of great help especially to those trying to develop their writing skills.

The book provides special guidance and support for weak students. It includes many question papers for reference.

I take this opportunity to thank all those who have helped me in the completion of this project.

I express my gratitude to our beloved Correspondent, Udyog Ratan Thiru J Sudhanandhen, a great lover of English language, for having so magnanimously encouraged me to write this book. The book owes its very existence to him. His whole-hearted support has been of immense help to me.

I would like to thank and acknowledge the following sources, which, among others, have been helpful to me in the preparation of this book.

1. English for Engineers and Technologists – Volume 2, Division of Humanities and Social Sciences, Anna University.
2. Learning to Communicate – A Resource Book for Scientists and Technologists – Dr V Chellammal, Anna University.
3. English for Engineers and Technologists – Teachers' Book.
4. The Structure of Technical English – A J Herbert.

5. English Pronouncing Dictionary – Daniel Jones.
6. Speaking English Effectively – Krishna Mohan and N P Singh.
7. Developing Communication Skills – Krishna Mohan and Meera Bannerji.
8. Written English for You – G Radhakrishna Pillai, K Rajeevan and P Bhaskaran Nair.

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Dr S Sumant

PART I

Grammar and Vocabulary

CHAPTER

1 Word Formation with Prefixes and Suffixes

A *Prefix* is a syllable (or syllables) placed at the beginning of a word to qualify its meaning and form a new word.
E.g: incorrect, disqualify

A *Suffix* is a syllable (or syllables) placed at the end of a word to qualify its meaning and form a new word.
E.g: childhood, loyalty

Examples

1. **Ad** 'intensification' as in adduce, adhere, adjoin, adjudge
2. **Ambi** 'on both sides' as in ambidextrous, ambivalent, ambiguous, ambiguity
3. **Amphi** 'both' as in amphibian, amphitheatre, amphibious
4. **Ante** 'before' as in antedate, antediluvian, antecedent, antemeridiem
5. **Anti** 'against' as in antidote, anti-romantic, antisocial, anti-national
6. **Arch** 'chief' as in archbishop, arch-enemy, arch-villain
7. **Auto** 'self' as in autobiography, autocrat, automobile, automatic, autograph
8. **Bene** 'well' as in benefit, benefactor, benevolent, benediction
9. **Bi** 'two, twice' as in bicycle, bilateral, bigamy, biweekly, bisect
10. **Circum** 'around' as in circumference, circumvent, circumnavigation, circumlocution
11. **Co** 'together' as in co-operate, co-ordinate, co-existence, co-education
12. **Con** 'with' as in conjunction, concord, concur, conform
13. **Contra** 'against' as in contradict, contraband, controversy, contrary, contravene
14. **Counter** 'against' as in counteract, counterbalance, counter-attack, counter-revolution
15. **De** 'down' as in dethrone, defame, demoralise, denationalise, dehydrate
16. **Demi** 'half' as in demigod, demi-official, demi-paradise
17. **Dis** 'the negative or opposite of' as in dislike, disagree, discharge, disintegrate, disadvantage, disability, disagreement, disconnect, discord, disorganise, disparity
18. **En** 'to put into or on, to make into to cause to be' as in encase, endanger, enlarge, enrich, engulf, enable,' enlist, enforce, enclose, ensure
19. **Em** 'to put into or on, to make into, to cause to be' as in empower, embark, embolden, emplane
20. **Equi** 'equal' as in equidistant, equilibrium, equilateral, equivalent
21. **Ex** 'former' as in ex-President, ex-convict, ex-wife, ex-husband
22. **Extra** 'outside, beyond' as in extracurricular, extraordinary, extravagant, extramarital
23. **Hetero** 'other, different' as in heterogeneous, heterodox, heterosexual
24. **Hexa** 'having or consisting of six of something' as in hexagon, hexameter
25. **Hyper** 'to an excessive degree, over' as in hypersensitive, hyperbole, hypertension, hypercritical

26.	**Il, In, Im, Ir**	'not' as in illiterate, illegal, illegible, illogical, incorrect, ineligible, indecent, invisible, incurable, improper, impossible, impolite, impure, incomprehensible, immaterial, immoderate, impious, irregular, irresponsible, irresistible, irrelevant
27.	**Inter**	'between, from one to another' as in international, intermediate, intercaste, intercollegiate, intercontinental, interconnect
28.	**Intra**	'on the inside, within' as in intramural, intramuscular, intravenous
29.	**Mal, Male, Mali**	'bad or badly, not correct or correctly, ill, evil' as in maladjusted, malpractice, malevolent, malnutrition
30.	**Mis**	'bad, wrong, not' as in misdirect, misspell, misconduct, mistrust, misbehave, mischief, misrule, mismanage, misappropriate, mislead, mishap
31.	**Mono**	'one, alone' as in monopoly, monogamy, monotheism, monotony, monosyllable, monologue.
32.	**Non**	'not' as in nonsense, non-stop, non-profit, non-violence, non-cooperation, non-entity, non-semester
33.	**Omni**	'all, everywhere' as in omnivorous, omnipotent, omnipresent, omniscient, omnibus
34.	**Over**	'from above, outside, across, excess, too much, more than usual' as in overcoat, overwork, overtime, over-confident, over-anxious, over-sensitive, overfed, overjoyed, overheat, overhead
35.	**Pan**	'of or relating to all or the whole of ' as in pan-American, pan-Islamic, pan-African, pan-global
36.	**Philo, Phil**	'liking or being fond of, love' as in philosophy, philanthropy, philology
37.	**Poly**	'many' as in polytechnic, polygamy, polytheism, polygon
38.	**Post**	'after' as in postgraduate, postpone, post-dated, post-war, post-script, postmortem
39.	**Pre**	'before' as in pre-war, prehistoric, precaution, premature, prefix
40.	**Pro**	'in favour of, supporting, for' as in pro-Chancellor, pro-government, pro-American, pro-life
41.	**Pseudo**	'false, not genuine' as in pseudonym, pseudo-science, pseudo-intellectual
42.	**Re**	'again' as in rewrite, return, refund, research, reassure, re-enter, re-apply, re-circulate, re-use, re-align
43.	**Self**	'self-sufficient, self-reliant, self-implied, self-educated
44.	**Semi**	'half, partly' as in semicircular, semi-final, semicolon, semiprecious
45.	**Sub**	'under, below, beneath, less than ' as in subway, submarine, substandard, subconscious, sub-plot, subordinate, submerge
46.	**Super, Sur**	'above, over, more than' as in Superstar, superstructure, supersonic, superimpose, superhuman, supernatural, supercharge, superphosphate, superficial
47.	**Supra**	'above; beyond' as in supranational
48.	**Trans, Tra**	'across; beyond' as in trans-Atlantic, transfer, transit, translate, transcribe
49.	**Tri**	'three' as in tricycle, tricolour, trinity, triangle
50.	**Ultra**	'extremely, excessively, beyond a specified limit or extent' as in ultra-modern, ultra-violet, ultrasonic, ultrasound
51.	**Un**	'not, against' as in unable, unkind, unknown, unfamiliar, unstable, unnatural, unbalanced, unthinking, undo, unbind, unearth, unimportant
52.	**Under**	'too little' as in underload, underpay, undersize, underrate, underemployed, undernourished below' as in underline, undercut, undercarriage, undergrowth, underlie
53.	**Vice**	'in place of; acting as an assistant to or in place of, next in importance to the rank specified' as in vice-Chancellor, vice-Admiral, vice-President, viceroy
54.	**Multi**	'having many of ' as in multicoloured, multimedia, multilingual, multinational

Important Suffixes

1.	**-age**	'a state or condition of ' as in bondage 'a set or group of ' as in baggage 'the cost of ' as in postage 'a quantity or measure of' as in mileage, dosage
2.	**-ance, -ence**	'an action or a state of' as in assistance, resemblance, confidence, abundance, observance, brilliance, innocence
3.	**-cy**	'the state or quality of being; having the status or position of' as in accuracy, supremacy, lunacy, aristocracy, democracy
4.	**-dom**	'a condition or state of; the rank of; an area ruled by; a group of' as in dukedom, kingdom, officialdom, freedom, boredom
5.	**-hood**	'the state or condition of being something; a group of people of the specified type' as in childhood; falsehood; priesthood; neighbourhood
6.	**-ing**	reading, writing, speaking, eating
7.	**-ion, -ation** **-ition, -sion** **- tion, -xion**	'the action or condition of ' as in confession, hesitation, competition, action, expression, oration, radiation, tension, complexion
8.	**-ic, -ical**	'of or concerning; that performs the specified action' as in poetic, scenic, Arabic, specific, comical, economical
9.	**-ice**	cowardice, practice, service
10.	**-ism**	'showing qualities typical of; the movement of something; the medical condition or disease indicated' as in socialism, capitalism, patriotism, heroism, Americanism, Buddhism, alcoholism, racism
11.	**-ment**	'the action or result of' as in development, judgment, punishment, astonishment, enchantment
12.	**-mony**	harmony, matrimony, ceremony
13.	**-ness**	'the quality, state or character of being' as in dryness, blindness, stillness, boldness, calmness, openness, darkness
14.	**-red**	hatred, kindred
15.	**-ship**	'the state of being somebody; a person's status or office, skill or ability at something' as in friendship, ownership, professorship, scholarship, lectureship, lordship, hardship
16.	**-th**	growth, width, sixth, wealth, depth, birth, death
17.	**-tude**	latitude, longitude, fortitude, magnitude
18.	**-ty**	loyalty, reality, cruelty, dignity, priority
19.	**-ure, -eur, -our**	'the action or process of; a group of things having a specific function' as in closure, failure, seizure, legislature, culture, stature, grandeur, tenure, honour
20.	**-y**	'full of ; having the quality of' as in dusty, icy, sticky, envy, memory, gluttony, villainy, study, remedy
21.	**-ard**	'having the specified, usually negative quality' as in drunkard, coward
22.	**-ate,-ee,-ey,-y**	'full of or showing a specified quality; a specified status or function' as in affectionate, passionate, doctorate, chlorinate, sulphate, nitrate, advocate, curate, magnate, examinee, payee, absentee, attorney, jury
23.	**-er, -or, -ar,**	'a person or thing that does; a person concerned with' as in speaker, writer, orator, sailor, beggar, mountaineer, pamphleteer, secretary, financier, dignitary

24.	**-ain,-an,-en,-on**	captain, villain, chieftain, librarian, citizen, warden, sexton
25.	**-ist,**	'a person believing in or practising; a person who does the specified action' as in atheist, journalist, socialist, dramatist, dentist, novelist, scientist
26.	**-ster**	'a person connected with or having the quality of' as in gangster, trickster, youngster, spinster
27.	**-monger**	war-monger, fish-monger, iron-monger, rumour-monger
28.	**-wright**	playwright
29.	**-let**	'little; unimportant, minor' as in booklet, piglet, starlet, pamphlet
30.	**-ling**	'little; a person or thing that is the object of the specified action' as in duckling, darling, weakling, hireling
31.	**-el,-le,-ule, -cel,-sel,-cle**	parcel, particle, damsel, chronicle, corpuscle, globule
32.	**-erel**	cockerel
33.	**-en**	chicken, kitten, wooden, golden, blacken, darken
34.	**-ete, -ette**	'small, artificial; female' as in cigarette, packet, usherette
35.	**-ock**	hillock, bullock
36.	**-y,-ie**	daddy, mummy, birdie, puppy
37.	**-ade**	crusade, brigade, blockade
38.	**-al**	animal, capital, arrival, denial, proposal
39.	**-ant**	'that is or does something; a person or thing' as in merchant, descendant
40.	**-ary, -ery -ory, -ry**	'concerned with; of' as in aviary, dispensary, monastery, salary, pantry, dowry, dormitory

Additional Examples

I. (M.Q.P. 2002)

(a) Add suitable endings to the following words to form adjectives.

(i) suburb
(ii) continue
(iii) retract
(iv) vigour

(b) Use two of the adjectives you've formed in sentences of your own.

Answer

(a) (i) suburban (ii) continuous (iii) retractable (iv) vigorous

(b) (i) suburban : In Chennai, there are suburban trains from Madras Beach to Tambaram.
(ii) continuous : Education is a continuous process.
(iii) retractable : I have a knife with a retractable blade.
(iv) vigorous : Heart patients must avoid vigorous exercises.

II. (Nov./Dec. 2002)

(a) Make nouns from the verbs given below by adding suitable suffixes.
(suffixes: '-tion', '-ment', '-ence', '-ance.')

(i) improve (ii) vibrate (iii) maintain (iv) refer

(b) Form adjectives from the nouns by adding suffixes like '-al'and '-ical.'

(i) physics (ii) nature (iii) tradition (iv) season

Answer

(a) (i) improvement (ii) vibration (iii) maintenance (iv) reference
(b) (i) physical (ii) natural (iii) traditional (iv) seasonal

III. (Apr./May 2003)

(a) Make nouns from the verbs given below by adding suitable suffixes.
(suffixes: –tion', '-ment', '-ence', '-ance')
(i) interfere (ii) cultivate (iii) invest (iv) accept

(b) Form adjectives from the nouns by adding suitable suffixes like '-al'. '-ical' and '-able'.
(i) biochemistry (ii) environment (iii) technology (iv) reason

Answer

(a) (i) interference (ii) cultivation (iii) investment (iv) acceptance
(b) (i) biochemical (ii) environmental (iii) technological (iv) reasonable

IV. Make antonyms of the following words by adding suitable prefixes. (Nov./Dec. 2003)

(a) Relenting
(b) Purity
(c) Sensitive
(d) Advantage

Answer

(a) Unrelenting
(b) Impurity
(c) Insensitive
(d) Disadvantage

V. Make antonyms of the following words by adding suitable prefixes. (Apr./May 2004)

(a) Associate
(b) Sufficient
(c) Common
(d) Normal / reliable

Answer

(a) Dissociate
(b) Insufficient
(c) Uncommon
(d) Abnormal / unreliable

VI. Change the following words into their opposites by adding suitable prefixes. (Jan. 2005)

(a) Ability
(b) Violence
(c) Fortune
(d) Legal
(e) Like
(f) Regular
(g) Moral
(h) Suitable

Answer

(a) Inability
(b) Non-violence
(c) Misfortune
(d) Illegal
(e) Dislike
(f) Irregular
(g) Immoral
(h) Unsuitable

VII. Give four words beginning with the prefix 'self' and four words beginning with the prefix 'super'.

Answer

(a) self = self-sufficient, self-reliant, self-implied, self-educated
(b) super = supermarket, supernatural, superpower, superstar

Word Formation

(A) Nouns from Verbs.

1.	Develop	development
2.	Suck	suction
3.	Conclude	conclusion
4.	Sanitise	sanitation
5.	Operate	operation
6.	Require	requirement
7.	Contaminate	contamination
8.	Displace	displacement
9.	Associate	association
10.	Direct	direction
11.	Maintain	maintenance

(B) Use the prefixes im-, in-, and un-, to find the opposites of these words.

1.	Comfortable	uncomfortable
2.	Sensitive	insensitive
3.	Pure	impure
4.	Skilled	unskilled
5.	Destructible	indestructible
6.	Exceptional	unexceptional
7.	Common	uncommon
8.	Reliable	unreliable

(C) Make a verb from each of the following adjectives.

(-ise/ ize, -fy, -en)

1.	Specific	specify
2.	Final	finalise
3.	Special	specialise
4.	Broad	broaden

5.	Electric	electrify
6.	Central	centralise
7.	Fresh	freshen
8.	Simple	simplify

(D) Make a noun from each of the following.

1.	Specific	specification
2.	Final	finalisation
3.	Special	speciality
4.	Broad	breadth
5.	Electric	electricity
6.	Central	centrality
7.	Fresh	freshness
8.	Simple	simplicity

(E) Add a suitable ending to each of the following words to form an adjective.

1.	Advantage	advantageous
2.	Suburb	suburban
3.	Produce	productive
4.	Continue	continuous
5.	Care	careful, careless
6.	Vigour	vigorous
7.	Retract	retractable
8.	Power	powerful, powerless
9.	Compare	comparative
10.	Avail	available
11.	Vehicle	vehicular
12.	Relate	relative
13.	Differ	different
14.	Comfort	comfortable

EXERCISE

I. Give the Noun form of.

1.	Verify	(M.Q.P.)
2.	Derive	(M.Q.P.)
3.	Weaken	(Apr.'94)
4.	Dispose	(Apr.'97)
5.	Observe	(Nov.'97)
6.	Deplete	(Apr.'98)
7.	Require	(Apr.'98)
8.	Stabilise	(Nov.'98)
9.	Generate	(Nov.'98)
10	Conduct	(Nov.'99)
11.	Classify	(Apr. 2000)
12.	Deny	(Apr. 2000)
13.	Repute	(Oct. 2000)

14. Pollute (Oct. 2000)
15. Beautify (Oct. 2000)

II. Give the Adjective form of.

1. Rely (Apr. 2000)
2. Dispute (Apr. 2001)
3. Action (Oct. 2000)
4. Suitability (Nov.'98)
5. Recovery (Nov.'98)
6. Classification (Apr.'98)
7. Communicate (Nov.'97)
8. Generate (Apr.'97)
9. Penetration (Apr.'97)
10. Production (Apr.'94)
11. Solution (M.Q.P.)
12. Verify (M.Q.P.)
13. Necessity
14. Prefer
15. Defect

III. Give the Verb form of.

1. Beauty (Apr. 1994, M.Q.P. 2001)
2. Stabilisation (Apr. 1994)
3. Recovery (Apr.'97)
4. Strength (Nov.'97)
5. Derivation (Apr.'98)
6. Production (Nov.'98)
7. Class (Apr.'98)
8. Pure (Apr. '99)
9. Action (Oct. 2000)
10. Weakness (Oct. 2000)
11. Motion (Oct. 2000)
12. Pollution
13. Decision
14. Conclusion
15. Transmission

IV. Add prefixes, suffixes to the following words in accordance with the meanings given against them.

(M.Q.P., Apr. '98)

1. _____ national: having contact with many nations.
2. _____ developed: not developed.
3. Deforest _____ : clearing of forests.
4. Submerge _____ : being placed under water.

V. Add prefixes to the following words to give the meanings given against them. (Apr. '94)

1. _____ national; between
2. _____ lateral: many
3. _____ marine: under
4. _____ pollution: against

VI. Add the correct prefixes to the following words to produce their opposites. (Apr. '97)

1. _____ connect
2. _____ conductor
3. _____ visible
4. _____ purity

VII. Add suffixes to the following to give the meanings given against them. (Nov.'97)

1. Simple _____ : make simple
2. Weight _____ : without weight
3. Micro _____ : instrument for seeing
4. Speed _____ : instrument for measuring

VIII. Add the correct suffixes to the following words to give the meanings given against them. (Apr. '98)

1. geo _____ : study of
2. weight _____ : without
3. spoon _____: full of
4. micro_____ : instrument for seeing

IX. Add the correct prefixes to the following words to give the meanings given against them. (Nov.'98)

1. _____ pollution: against
2. _____ marine: under
3. _____ national: many
4. _____ vision: distant

X. Add suitable prefixes to give the opposites. (Apr.'99)

1. _____ conductor
2. _____ possible

XI. Give the meanings of these prefixes. (Nov.'99)

1. ambi _____
2. poly _____

XII. Add suitable prefixes to give the opposites. (Apr. 2000)

1. _____Proper
2. _____Behave

XIII. Add prefixes / suffixes to the following in accordance with the meanings given against them.(Oct.2000)

1. _____ marine: under
2. _____ logy: (the study of) earth
3. spoon_____ : full of
4. speed _____ : instrument for measuring

XIV. Give the meanings of these prefixes. (Oct. 2000)

1. Un
2. Mis

XV. Add suitable prefixes to give the opposites. (Apr. 2001)

1. _____ normal
2. _____ human

XVI. Add prefixes/ suffixes to the following to match the meanings given against them. (M.Q.P. 2001)

1. _____ national : above and beyond
2. _____ nourished : insufficient
3. _____ bole : over statement
4. _____ communicate : expel from the communion
5. _____ beauty : verb form
6. _____ sensitive : noun form

XVII. Add suffixes / prefixes to the following words in accordance with the meanings given against them.

1. _____ merge : place below water
2. require _____ : something necessary
3. _____ reliable : not very dependable
4. construct _____ : act of combining (Apr. '94)

XVIII. Add suffixes/prefixes to the following words in accordance with the meanings given against them.

1. advantage _____ : having advantage
2. continue _____ : that which continues
3. _____ applicable : cannot be applied
4. _____ legal : not legal (Apr. '95)

XIX. Add suffixes / prefixes to the following words in accordance with the meanings given against them.

1. _____ zero : less than zero
2. _____ tension : abnormal blood pressure
3. understand _____ : that which can be understood
4. submerge _____ : that which can be submerged. (Oct. '95)

XX. Add suffixes / prefixes to the following words in accordance with the meanings given against them.

1. _____ national : having contact with many nations.
2. _____ purity : not pure
3. Micro _____ : instrument for seeing
4. weight _____ : without weight (Apr. '97)

XXI. Add suffixes / prefixes to the following words in accordance with the meanings given against them.

1. _____ pollution : against
2. _____ marine : under
3. geo _____ : study of
4. micro _____ : instrument for seeing (Nov.'96, Oct.'97)

XXII. Add suffixes / prefixes to the following words in accordance with the meanings given against them.

1. _____ sonic : above, more than
2. _____ conductor : not
3. Simple _____ : make simple
4. spoon _____ : full of (Apr. '98)

XXIII. Add suffixes / prefixes to the following words in accordance with the meanings given against them.

1. _____ national : many
2. _____ stop : self
3. weight _____ : without
4. red _____ : resembling (Oct. '98)

XXIV. Make negatives from the following words by adding appropriate affixes.

1. fair 2. smoker 3. understand 4. care (Apr. '97)

XXV. Add the correct prefixes to the following words to produce their opposites.

1. _____ justice
2. _____ material
3. _____ possible
4. _____ comfort (Apr. '96)

XXVI. Add the correct prefixes to the following words to produce their opposites.

1. _____ destructible 2. _____ common
3. _____ exceptional 4. _____ skilled (Nov. '96)

XXVII. Add the correct prefixes to the following words to produce their opposites.

1. _____ comfortable 2. _____ reliable
3. _____ pure 4. _____ sensitive (Apr. '97)

XXVIII. Add prefixes / suffixes to the following words in accordance with the meanings given against them.

1. _____ sensitive : abnormally or excessively sensitive.
2. _____ violet : having wavelength beyond the violet end of the spectrum.
3. _____ standard : not having the required or normal quality.
4. _____ structure : subordinate or underlying parts on which something is built. (Apr. '96)

XXIX. Add prefixes / suffixes to the following words in accordance with the meanings given against them.

1. _____ marine : under the sea
2. _____ pollution : against pollution
3. geo _____ : study of the earth
4. speed _____ : instrument for measuring speed (Nov. '96)

XXX. Add prefixes / suffixes to the following words in accordance with the meanings given against them.

1. _____ national : having contact with many nations
2. _____ developed : not developed
3. simple _____ : make simple
4. weight _____ : without weight (Apr. '97)

CHAPTER

2 Synonyms (Words and Meanings)

A *Synonym* is a word that has the same meaning as another word.

E.g: 'scared' is the synonym for 'afraid'.

Examples

I. Match the words in column A with their meanings in column B.

	A	B
(a)	amalgamation	giving out rays
(b)	chip	bringing together
(c)	radiation	getting completely exhausted
(d)	depletion	device composed of silicon

Answer

(a)	amalgamation	bringing together
(b)	chip	device composed of silicon
(c)	radiation	giving out rays
(d)	depletion	getting completely exhausted

II. Match the words in column A with their meanings in column B. (Nov./ Dec. 2002)

	A	B
(a)	contamination	intensify
(b)	fission	misuse
(c)	aggravate	division of the atom
(d)	abuse	pollution

Answer

(a)	contamination	pollution
(b)	fission	division of the atom
(c)	aggravate	intensify
(d)	abuse	misuse

III. Match the words in column A with their meanings in column B. (Apr. / May 2003)

	A	B
(a)	countless	generate
(b)	tranquil	extended walking
(c)	produce	numerous
(d)	trekking	calm; peaceful

Answer

(a)	countless	numerous
(b)	tranquil	calm; peaceful
(c)	produce	generate
(d)	trekking	extended walking

IV. Match the words in column A with their meanings in column B. (Nov./Dec. 2003)

	A	**B**
(a)	hazard	something that rouses people to activity
(b)	core	choice
(c)	stimulus	innermost part
(d)	option	danger

Answer

(a)	hazard	danger
(b)	core	innermost part
(c)	stimulus	something that rouses people to activity
(d)	option	choice

V. Match the words in column A with their meanings in column B. (Apr./May 2004)

	A	**B**
(a)	breeder	calm; peaceful
(b)	drawback	severe
(c)	tranquil	producer
(d)	stringent	disadvantage

Answer

(a)	breeder	producer
(b)	drawback	disadvantage
(c)	tranquil	calm; peaceful
(d)	stringent	severe

VI. Match the words in column A with their meanings in column B. (Jan. 2005)

	A	**B**
(a)	objective	severe
(b)	hazard	aim
(c)	spell	danger
(d)	stringent	a condition caused by magical powers

Answer

(a)	objective	aim
(b)	hazard	danger
(c)	spell	a condition caused by magical powers
(d)	stringent	severe

VII. Match the words in column A with their meanings in column B.

	A	**B**
(a)	renowned	world
(b)	globe	upkeep
(c)	maintenance	choice
(d)	option	famous

Answer

(a)	renowned	famous
(b)	globe	world
(c)	maintenance	upkeep
(d)	option	choice

VIII. Match the words in column A with their meanings in column B.

	A	**B**
(a)	jargon	objective
(b)	equilibrium	attribute
(c)	target	state of being balanced
(d)	ascribe	highly technical expressions

Answer

(a)	jargon	highly technical expressions
(b)	equilibrium	state of being balanced
(c)	target	objective
(d)	ascribe	attribute

IX. Match the words in column A with their meanings in column B. (Apr./May 2003)

	A	**B**
(a)	inedible	schedule
(b)	afforestation	importance
(c)	regimen	unfit to eat
(d)	primacy	expansion of forests

Answer

(a)	inedible	unfit to eat
(b)	afforestation	expansion of forests
(c)	regimen	schedule
(d)	primacy	importance

X. Match the words in column A with their meanings in column B. (Apr./May 2004)

	A	**B**
(a)	nutrition	native
(b)	indigenous	objective, result aimed at
(c)	target	conservation
(d)	preservation	nourishment

Answer

(a)	nutrition	nourishment
(b)	indigenous	native
(c)	target	objective, result aimed at
(d)	preservation	conservation

XI. Match the words in column A with their meanings in column B. (Nov./Dec. 2004)

	A	**B**
(a)	conservation	the make up of a book, newspaper, etc.
(b)	layout	preservation

Answer

(a)	conservation	preservation
(b)	layout	the make up of a book, newspaper, etc.

Additional Examples

I	(a) vicissitudes	misfortunes
	(b) constraint	limitation
	(c) improvise	change or modify
	(d) nuances	finer aspects
II	(a) type	reading-matter, as distinct from illustrations
	(b) celebrated	famous
	(c) dictate	to state or order something with the force of authority
III	(a) cumulative	gradually increasing in amount, force, etc., by adding one after another
	(b) accelerate	increase speed rapidly
	(c) simultaneously	happening or done at the same time
	(d) viable	possible
IV	(a) prohibitive	preventing or intending to prevent people from using or buying something
	(b) alien	foreign
	(c) perpetuating	continuing
	(d) discarding	throwing something out or away
V	(a) archaeology	the study of ancient cultures, peoples and periods of history
	(b) dynasty	a series of rulers all belonging to the same family
	(c) excavate	to reveal or take out something that has been buried in the ground
	(d) manuscript	a handwritten or typed first copy of a book before it is printed
VI	(a) myth	a story to justify religious beliefs and social customs
	(b) offering	something that is given especially to god
	(c) perpetual	never ends or changes
	(d) portrait	a drawing, painting or photograph of a person
VII	(a) subsequent	following
	(b) flourish	succeed
	(c) culminate	end
	(d) illustrate	explain
VIII	(a) resemble	similar
	(b) distribute	to separate something into parts and supply the parts to various people or places
	(c) proliferate	to reproduce rapidly
	(d) aquatic	growing or living in or near water

EXERCISE

Match the words in column A with their meanings in column B.

	A	B
1.	(i) abnormal	(a) wrong use
	(ii) abuse (Nov./Dec. 2002)	(b) abundant; rich
	(iii) accumulated	(c) different in an undesirable way from what is normal
	(iv) affluent	(d) stored up
2.	(i) afforestation (Apr.'97, Oct.'97)	(a) make worse or more serious
	(ii) deforestation (Apr.'97)	(b) growing old
	(iii) ageing	(c) clearing of forests
	(iv) aggravate (Nov./Dec. 2002)	(d) expansion of forests, planting of trees
3.	(i) amalgamation (Nov.'96, M.Q.P.)	(a) choice between two things
	(ii) alternate	(b) bringing together; mixture
	(iii) alternative	(c) organism able to live both on land and in water
	(iv) amphibian	(d) one of every two; every second one
4.	(i) anticipate (Apr.'96,Oct.' 96, Nov.'96,Nov.'97)	(a) arrangement; order
	(ii) apparent	(b) suitable
	(iii) appropriate (Apr.'96)	(c) consider before hand; see before hand
	(iv) array	(d) obvious; clearly seen or understood
5.	(i) artificial intelligence	(a) beautiful
	(ii) artistic	(b) property
	(iii) assets	(c) make use of
	(iv) avail	(d) the capacity of a computer for learning and decision taking
6.	(i) ballast	(a) combined performance of professional dancers on the stage
	(ii) ballet	(b) crushed rock or gravel
	(iii) benevolent (M.Q.P.)	(c) producer
	(iv) breeder (Apr.'95, Apr./May 2004)	(d) kind and helpful
7.	(i) casually (Nov.'98)	(a) magical appeal
	(ii) informal (Nov.'98)	(b) reservoir, a place where water is stored and collected
	(iii) catchment	(c) in an unplanned, careless manner
	(iv) charisma	(d) unmethodical; unconventional
8.	(i) chip (M.Q.P.)	(a) arranged according to dates
	(ii) choreography	(b) refined; of ancient Greek and Roman art and literature of ancient times
	(iii) chronological	(c) designing of dance
	(iv) classical	(d) device composed of silicon
9.	(i) coagulum (Nov.'98)	(a) the act of binding oneself to do something
	(ii) collateral	(b) thick; sticky; solid mass
	(iii) commitment (Apr.'98)	(c) complete
	(iv) comprehensive	(d) property pledged by a borrower

10.	(i) congestion	(a) preservation
	(ii) conservation (Apr.'97,Nov.'97)	(b) pollution
	(iii) consumption	(c) abnormal accumulation of people, traffic
	(iv) contamination (Apr.'94,Apr.'97, Apr.'98,Nov./Dec. 2002)	(d) use
11.	(i) conventional	(a) the innermost part
	(ii) convoy	(b) traditional
	(iii) coolant	(c) group
	(iv) core (Apr.'98, Nov./Dec. 2003)	(d) cooling fluid
12.	(i) countless (Apr./May 2003)	(a) confined within narrow limits or space
	(ii) cramped (Dec. 2001)	(b) the most important or difficult part of a problem, an issue, etc.
	(iii) criminal	(c) numerous
	(iv) crux	(d) law breaker
13.	(i) cyanidation	(a) thickness; solidity and compactness
	(ii) delightful	(b) process of treating something with a cyanide compound
	(iii) density	(c) getting completely exhausted
	(iv) depletion (M.Q.P.)	(d) giving delight; very pleasant
14.	(i) deposits (Oct. 2000)	(a) tool; instrument; implement
	(ii) device	(b) illness; sickness; ailment
	(iii) disaster	(c) accumulation
	(iv) disease	(d) misfortune
15.	(i) disposal (Nov.'94)	(a) suffering;
	(ii) distress (Nov.'96)	(b) variety; having differences; variation
	(iii) diversity (Apr.'96, Apr.'97)	(c) impediment; obstacle; hindrance; handicap
	(iv) drawback (Apr./May 2004)	(d) getting rid of; elimination; removal
16.	(i) durable	(a) something put inside a container
	(ii) ecology (Nov.'97)	(b) long lasting
	(iii) efficiency	(c) biology dealing with mutual relations between organisms and their environment
	(iv) enclosure	(d) degree of performance
17.	(i) effluent	(a) abundant; rich
	(ii) affluent	(b) insist on
	(iii) enhance	(c) liquid waste matter; sewage
	(iv) enforce (Nov.'94)	(d) increase
18.	(i) ensemble	(a) very good; of very high quality
	(ii) enterprise (Apr.'94, Apr.'97)	(b) group of artistes; something viewed as a whole; general effect
	(iii) estimate	(c) costly; high priced; venture
	(iv) excellent	(d) calculate
19.	(i) exceptional	(a) stimulate
	(ii) excite	(b) strange; unusual and attractive
	(iii) exotic (Apr.'96)	(c) costly; highly priced
	(iv) expensive	(d) extraordinary; remarkable; wonderful

20. (i) exploitation		(a) to sell and transport goods to a foreign country
(ii) export		(b) utilisation; usually unfairly; for one's own benefit
(iii) import		(c) extremely beautiful or delicate; finely or skilfully made or done
(iv) exquisite		(d) bring into a country—people, goods, etc., from foreign countries
21. (i) extraction (Apr.'96, Nov.'96, Apr.'98)		(a) from outside the planet Earth and its atmosphere
(ii) extraterrestrial (Apr.'95)		(b) wild imagination
(iii) facilitate		(c) obtaining juices by crushing; boiling
(iv) fantasy (Apr.'95)		(d) make easy
22. (i) fatal (Nov.'96, Apr.2001)		(a) practicable; attainable; procurable; securable
(ii) feasible		(b) response
(iii) feedback (Apr.'96, Oct.'96, Nov.'96, Apr.'97)		(c) cutting down
(iv) felling		(d) resulting in death
23. (i) ferment		(a) division of the atom
(ii) fettered		(b) to change or make something by means of a chemical reaction involving yeast or bacteria
(iii) fiction (Apr.'95)		(c) chained
(iv) fission (Apr.'94, Apr.'97, Nov./Dec.2002)		(d) fantasy; not factual
24. (i) flotation		(a) often
(ii) folk		(b) paintings on walls or ceilings
(iii) frequent		(c) people in general
(iv) frescoes		(d) remaining on the surface
25. (i) genetics		(a) a person having a great and exceptional capacity of mind
(ii) genius		(b) splendid; magnificent
(iii) globe		(c) pertaining to plant and animal breeding
(iv) glorious (Apr.'97)		(d) world; sphere
26. (i) grab		(a) something which is passed down over many years within a family or nation
(ii) haggard		(b) to take something firmly and suddenly
(iii) hazard (Apr.'94, Nov./Dec. 2003, Jan.2005)		(c) looking very tired and unhappy
(iv) heritage (Apr.'97)		(d) danger; peril
27. (i) hoarding		(a) dry, outer covering of grain, seed, etc.
(ii) holistic		(b) loud protest
(iii) hue and cry		(c) carefully saving and guarding
(iv) husk		(d) as a whole and not in parts; total
28. (i) iconography		(a) to sell and transport goods to a foreign country
(ii) impediment		(b) illustration or drawing of ancient figures
(iii) import (Dec. 2000)		(c) obstacle; hindrance
(iv) export		(d) bring into a country—people, goods, etc., from foreign countries

29. (i) inadvertent		(a) undestroyable; imperishable
(ii) indigenous (Nov.'98, May 2002)		(b) necessary
(iii) indestructible		(c) negligent; inattentive; careless; unheeding
(iv) indispensable (Apr.'98)		(d) native
30. (i) indology		(a) unfit to eat
(ii) inedible (Apr.'96, Apr.'97, Oct.'97,Oct.'98)		(b) the study of India
(iii) informal (Oct.'96, Nov.'98)		(c) in an unplanned; careless manner
(iv) casually (Oct.'96, Nov.'98)		(d) unmethodical; unconventional
31. (i) infrastructure (Apr.'96, Nov.'97)		(a) immediately; suddenly; abruptly; quickly
(ii) initiative		(b) having the quality of introducing new things; making changes
(iii) innovative (Apr.'96, Apr.'97, Apr.'98)		(c) system of services forming a basis
(iv) instantly (Oct.'95)		(d) enterprise
32. (i) innovations		(a) whole; unaffected; unchanged
(ii) intact		(b) detailed list of goods with the estimated worth
(iii) intaglio		(c) introduction of new things or changes
(iv) inventory		(d) an engraving on stone with a greasy substance, and producing a printed impression therefrom
33. (i) jeopardy		(a) contents of an illustrated book other than the pictures
(ii) letterpress		(b) to rise and float in the air, especially by means of magical or spiritual powers
(iii) levitate		(c) process of printing from the parts of a flat stone or metal surface
(iv) lithography		(d) in danger; in peril; endangered
34. (i) lubrication		(a) that which can be beaten or pressed into different shapes easily
(ii) lush (M.Q.P.)		(b) upkeep; preservation; conservation
(iii) maintenance		(c) oiling; greasing
(iv) malleable		(d) growing thickly
35. (i) malevolent		(a) one who moves from one place to another
(ii) benevolent		(b) doing evil or causing harm to others
(iii) microprocessor		(c) kind; helpful; generous
(iv) migrant		(d) a very small computer, or a unit of one, consisting of one or more microchips
36. (i) miniature (Oct.'98)		(a) normal; typical; realistic
(ii) natural		(b) the faculty of verbal expression and the use of words in human communication
(iii) natural language		(c) central part of an atom
(iv) nucleus		(d) very small painting

37.	(i) nutrition	(a) method of printing in which the ink is transferred from a plate to a rubber surface and then on to paper
	(ii) objective (Jan. 2005)	(b) being out of date
	(iii) obsolescence (Apr.'97)	(c) nourishment
	(iv) offset	(d) aim
38.	(i) option (Oct.'98, Nov./Dec.2003)	(a) limit
	(ii) panorama	(b) choice
	(iii) parameter	(c) a small amount
	(iv) paucity	(d) a complete view of a wide stretch of land, a continually changing view or scene
39.	(i) pedestrian	(a) to make a way into or through something
	(ii) penetrate	(b) continuing firmly; lasting; long standing
	(iii) persistent	(c) view
	(iv) perspective	(d) one who walks
40.	(i) plying (Nov.'96)	(a) valuable; costly; worthy; high-priced
	(ii) pollute	(b) moving between places
	(iii) porridge	(c) contaminate
	(iv) precious	(d) soft food made by boiling a cereal in water or milk
41.	(i) prevalent	(a) regarded as more important
	(ii) primacy (Apr./May 2003)	(b) existent
	(iii) priority	(c) generate
	(iv) produce (Apr./May 2003)	(d) important
42.	(i) projection	(a) push forward
	(ii) propel	(b) a plan or scheme suggested
	(iii) proposition	(c) possible or probable customer; objective; result aimed at
	(iv) prospect	(d) shooting forward; planning
43.	(i) protectionism	(a) unusual
	(ii) provocative	(b) giving out rays
	(iii) radiation (M.Q.P., Apr.'98)	(c) system of defending home industries
	(iv) rare	(d) intentionally annoying
44.	(i) react	(a) rules
	(ii) recruit	(b) schedule; a set of instructions; a systematic course of action
	(iii) regimen (May 2000, Apr./May 2003)	(c) change
	(iv) regulations (Nov.'96)	(d) take people into service on contract
45.	(i) relate	(a) distant; far away in space or time
	(ii) reliable	(b) tell
	(iii) remote	(c) convertible; transformable; modifiable
	(iv) renewable	(d) trustworthy; dependable; faithful

46. (i) renowned		(a) a reciprocal action or effect
(ii) repercussion		(b) to fill again
(iii) replenish (May 2000)		(c) a place where things are stored
(iv) repository		(d) famous; distinguished; notable; well-known
47. (i) retract		(a) relating to the country side
(ii) robot		(b) relating to towns and cities
(iii) rural (Oct. 2000)		(c) mechanical man; a machine that can perform the actions of a person
(iv) urban (Oct. 2000)		(d) withdraw
48. (i) salvage (Nov.'96, Oct.'98, Apr.'99)		(a) an area for wild birds or animals
(ii) sanctuary		(b) quickly or easily receiving impressions
(iii) semiconductor		(c) rescue; protect; save
(iv) sensitive		(d) that which conducts electricity partially
49. (i) sensor		(a) of grand appearance, attracting public attention
(ii) sequence		(b) complexity; having the latest improvements or advanced methods
(iii) sophistication		(c) a device that detects light, heat, pressure, etc.
(iv) spectacular (Apr.'96)		(d) connected line of events
50. (i) spell (Jan. 2005)		(a) writing materials
(ii) statistics		(b) attraction exercised by a person on others
(iii) stationary (Oct. 2000)		(c) numerical facts systematically arranged
(iv) stationery(Oct. 2000)		(d) not moving or changing in condition or quantity
51. (i) stagnant (Nov.'96, Oct.'98)		(a) wandering
(ii) statutory (Apr.'96)		(b) something that rouses people to activity
(iii) stimulus (Dec. 2000, Nov./Dec.2003)		(c) required by written law or legislation
(iv) stray		(d) not moving or changing
52. (i) streamline		(a) severe; strict; stern
(ii) stringent (Nov.'94, Apr.'98, Apr./May 2004, Jan. 2005)		(b) a district away from the centre of a town or city, especially where people live
(iii) submergence (Apr.'97, Oct.'97)		(c) make more efficient and effective
(iv) suburb		(d) being placed under water
53. (i) support price		(a) continuation of life
(ii) survival		(b) hanging
(iii) suspension		(c) specially made
(iv) tailored		(d) stipulated minimum amount of money to be paid for buying a commodity
54. (i) target (Apr.'96, Apr.'97,Nov.'97, Apr.'98, Nov.'98)		(a) hard pottery used as ornamental material in making statues, figures, etc.
(ii) taxonomy (May 2000)		(b) objective; result aimed at
(iii) technology		(c) classification of things
(iv) terracotta		(d) applied science

55. (i) thriving — (b) developing well and being successful
(ii) trade fair — (c) affair; business
(iii) tranquil (Apr.'97, Apr./May 2003, Apr./May 2004) — (a) calm; peaceful
(iv) transaction (Apr.'96) — (d) periodical gathering for sale of goods at fixed place and time

56. (i) translucent — (b) admitting light to pass through, but not transparent
(ii) trekking (Apr./May 2003) — (a) extended walking
(iii) unique — (d) novel; original; strange; unheard of
(iv) unbiased — (c) impartial

57. (i) uranium — (c) a chemical element, used as a source of nuclear energy
(ii) urban (Oct. 2000) — (d) relating to towns and cities
(iii) rural (Oct. 2000) — (a) relating to the countryside
(iv) vagaries — (b) strange or sudden changes that are difficult to predict

58. (i) vehement — (b) forceful
(ii) vigour — (c) strength
(iii) violation (Nov.'96) — (d) non-observance
(iv) virtually — (a) almost

59. (i) vital — (c) very important
(ii) volatile — (a) that easily changes into gas or vapour
(iii) worsted — (b) yarn spun from wool

CHAPTER

3 Antonyms

An *Antonym* is a word that means the opposite of another word.

E.g:'old' has two possible antonyms: 'young' and 'new'.

Examples

I. Make antonyms of the following words by adding suitable prefixes. (Nov./Dec.2003)

(a) relenting × unrelenting
(b) purity × impurity
(c) sensitive × insensitive
(d) advantage × disadvantage

II. Make antonyms of the following words by adding suitable prefixes. (Apr./May 2004)

(a) associate × dissociate
(b) sufficient × insufficient
(c) common × uncommon
(d) normal × abnormal
(e) reliable × unreliable

III. Change the following words into their opposites by adding suitable prefixes. (Jan.2005)

(a) ability × inability
(b) violence × non-violence
(c) fortune × misfortune
(d) legal × illegal
(e) like × dislike
(f) regular × irregular
(g) moral × immoral
(h) suitable × unsuitable

IV. Use the prefixes im-, in-, and un- to get the opposites of the following words.

(a) comfortable (b) pure (c) destructible
(d) common (e) sensitive (f) skilled
(g) exceptional (h) reliable

Answer

(a) uncomfortable (b) impure (c) indestructible
(d) uncommon (e) insensitive (f) unskilled
(g) unexceptional (h) unreliable

EXERCISE

Use suitable prefixes to find the opposites of the following words.

1. material
2. accurate
3. decisive
4. sensitive
5. avoidable
6. expected
7. direct
8. affected
9. faithful
10. essential
11. capable
12. precise
13. famous
14. convenience
15. distinguishable
16. equality
17. formal
18. audible
19. direct
20. proper
21. decided
22. assuming
23. tolerable
24. sufficient
25. separable
26. even
27. equal
28. defined
29. partial
30. effective
31. authentic
32. applicable
33. perceptible
34. firm
35. convertible
36. mortal
37. glorious
38. forgettable
39. fortunate
40. familiar
41. stability
42. aided
43. approachable
44. confirmed
45. civilised
46. breakable
47. controllable
48. potent
49. practicable
50. exact
51. conclusive
52. consistent
53. eligible
54. distinct
55. disputable
56. discipline
57. checked
58. changeable
59. ceremonious
60. biased
61. secure
62. transitive
63. significant
64. probable
65. possible
66. plausible
67. personal
68. fertile
69. perishable
70. permanent
71. penetrable
72. dispensable
73. corruptible
74. curable
75. digestible
76. describable
77. defensible
78. exceptional
79. democratic
80. hygienic
81. manageable
82. qualified
83. sympathetic
84. bearable
85. sensible
86. pregnable
87. mobile
88. modest
89. measurable
90. auspicious
91. articulate
92. definite
93. organic
94. perfect
95. moderate
96. mature
97. prudent
98. propriety
99. polite
100. compatible
101. adventure
102. violence
103. legible
104. believe
105. honour
106. sense
107. behave
108. calculate
109. comfort
110. ability
111. pleasure
112. legal
113. quote
114. integrate
115. deed
116. manage
117. represent
118. agree
119. able
120. reparable
121. religious
122. regular
123. logical
124. literate
125. connect
126. appear
127. allow
128. organize
129. obey
130. please
131. legitimate
132. aligned
133. aggression
134. cooperation
135. resident
136. appropriate
137. conduct
138. lead
139. judge
140. spell
141. understand
142. continue
143. like
144. honest
145. relevant
146. rational
147. recoverable
148. climax
149. clockwise
150. hero
151. septic
152. social
153. semester

CHAPTER

Verb Patterns (Sentence Patterns)

SVOCA

S - Subject V - Verbal O - Object

C - Complement A - Adjunct

In every sentence the most important word is the verb. A verb shows action or activity or work done.

Look at the following sentences:

1. Sita sings.
   V
2. Gopal speaks.
   V
3. They play.
   V

Subject (S):

To get the subject 'S' ask the question 'Who?' before the verb.

For example, Who sings Sita sings.

Who speaks? Gopal speaks, etc.

Object (O):

To get the object 'O' ask the question 'What' or 'Whom'. 'What' is for things and 'Whom' is for persons. Persons may be nouns or pronouns.

Pronouns : me, us, you, him, her, it, them

Examples

He bought a book (a book=O)

I saw him (him=O)

Adjunct (A):

To get 'A' ask the question when, where or how.

When : Time: at 4 O' clock, in the morning, yesterday, tomorrow, last year, etc.

Where : Place : at the railway station, etc.

How: Manner: slowly, fast, etc.

Examples

I saw him at the station : Where? at the station (A)

He wrote a letter yesterday :When? Yesterday (A)

He walks very fast : How? Very fast (A)

The Adjunct (A) can come before S, after S, before V and after O.

(It does not often come between V and O)

A A A

To my surprise, he hardly ever touched his books last month.

Complement (C):

A Complement completes the meaning of a sentence.

For example, in the sentence: 'He painted the door red', the word 'red' completes the meaning of the sentence. Therefore 'red' is 'C'.

The following sentence is incomplete in meaning : 'They appointed him'. We do not know they appointed him as what, as Secretary, Clerk, Accountant, or as a Steno.

But if the sentence is : 'They appointed him (as) Secretary', the word 'Secretary' completes the meaning of the sentence and as such it is 'C'.

The basic difference between the 'Object' and the 'Complement' is that 'Object' can be used to change the verb into the Passive Voice but a 'Complement' cannot be used for this purpose. For example.

He wrote a letter. (Active Voice)

A letter was written by him. (Passive Voice)

'They appointed him Captain'. The word 'Captain', cannot become the Subject in the Passive form, only 'he' (him) can serve this purpose.

'C' comes after verbs in the 'be' form, am, is, are, was, were, etc.

Examples

He is a doctor.

I am a student.

Similarly the verbs 'become' 'make' 'appoint', 'choose', 'select', 'elect' 'nominate', etc. have a 'C'

Examples

He became a Journalist.

They chose him Captain.

Examples

1. He met his friend yesterday.
   - He - S
   - met - V
   - his friend - O
   - yesterday - A
2. I will write an essay tomorrow.
   - I - S
   - will write - V
   - an essay - O
   - tomorrow - A

3. Yesterday he met his friend at his house at 6 O' clock in the evening.

yesterday	-	A
he	-	S
met	-	V
his friend	-	O
at his house	-	A
at 6 O' clock	-	A
in the evening	-	A

EXERCISE

Analyse the following sentences into S, V, O, C and A.

1. Today he has come.
2. I met him yesterday at his office.
3. They play chess everyday.
4. They made him Chief Secretary last year.
5. She sings songs beautifully.
6. I can drive a car easily.
7. You must read your lessons regularly.
8. Last week an accident occurred at P.S. Park.
9. We speak English fluently.
10. He wrote the reply carefully.
11. Geetha gave a dance performance last month.
12. My friend is a doctor.
13. They play chess everyday.
14. He was elected president last year.
15. The leader addressed the crowd cheerfully.
16. By the beginning of March, Iraq withdrew its forces from Kuwait.
17. The door opened with a bang.
18. You must read your lessons regularly.
19. He wrote the answer carefully.
20. I met my friend last week.
21. He was going to his office.
22. The sun rises in the east.
23. The magazine published my poem.
24. Last week I met him at Madras.
25. The postman brought her a parcel yesterday.
26. Babu writes slowly.
27. I met him yesterday at the office.
28. They appointed him captain last year.

CHAPTER

5 Subject–Verb Agreement

The verb must agree with its subject in number and person.
If the subject is singular, the verb will also be singular. If the subject is plural, the verb must also be plural.
E.g. I am, we are, you are, he is, she is, it is, they are.

Examples

1. Two or more singular subjects connected by *and* usually take a verb in the plural.
   Rajan and Gopal *are* friends.
   Fire and water *do* not agree.
   Alex and his parents *have* gone home.
   Vijay and his father *have* not returned yet. (not *has*)
2. If two singular nouns refer to the same person or thing, the verb must be singular. The Article is used once when the two nouns refer to the same person.
   The Secretary and Correspondent *has* come.
   The orator and statesman *is* dead.
   If different persons were referred to, the article would be used before each noun and the verb would be plural.
   The Secretary and the Correspondent *have* come.
3. If two subjects together express one idea, the verb may be in singular.
   Bread and butter *is* wholesome food.
   Slow and steady *wins* the race.
   The long and the short of the matter *is* this.
4. Either, neither, any, each, everyone, many a, must be followed by a singular verb.
   Neither of them *is* good at English.
   Either of them *deserves* a prize.
   Many a man *has done* this before.
   Everybody who *has* a fever must go home immediately.
   Each student *has won* the prize.
5. *Nobody, no one, nothing, somebody, someone, something*, should be followed by a singular verb.
   Nobody *works* harder than Alex does.
   No problem *is* harder to solve than this one.
   Something *is* better than nothing.
   Someone *has broken* the chair.
6. Two or more singular subjects connected by *or, nor, either or, neither nor*, take a verb in singular.
   Either Abdul or Rahim *has* taken your pen.
   Neither John nor his brother *was* there.
7. When subjects joined by *or*, *nor* are of different numbers, the verb must be plural and the plural subject must be placed next to the verb.
   Sita or her parents *have* come.
   Neither the Principal nor the Professors *were* present.
   Either he or his friends *have made* this mistake.

8. When the subjects joined by *or, nor,* are of different persons, the verb agrees in person with the subject nearer to it.
   Either you or he *has* done it.
   Either he or I *am* responsible for it.
9. A collective noun takes a singular verb when the collection is thought of as one whole; a plural verb when the individuals of which it is composed are thought of.
   The committee *has* chosen its President.
   The committee *are* divided on this point.
10. If a title of a literary work, or the name of a house or a hotel, is a plural, for purposes of agreement it is treated as a singular, since it is only one title or one building.
   Gulliver's Travels was written by Swift.
   The Arabian Nights has delighted many generations.
11. When the subject is *one of*, followed by a plural noun, the verb is singular.
   One of my friends *has* gone abroad.
   One of his uncles *is* a doctor.
12. When the subject is the formal *there*, the verb agrees with the 'real' subject that follows it.
   There *are* many books in our library.
   There *is* a book on a table.
   There *are* several pages missing from this book.
   There *is* a cause for everything.
   There *was* an accident here last week.
13. When a plural number applies to distances, weights, heights or amounts of money and represents a single figure or quantity, it is treated as a singular and takes a singular verb.
   Fifty kilometres *is* a good distance.
   Five hundred rupees *is* a good sum of money.
14. 'Class' nouns such as clothing, food, furniture, crockery, cutlery, stationery and footwear are singular, and must therefore take a singular verb.
   The furniture in this room *is* very old.
   Much food *was* wasted.
15. *A pair of* when applied to things where the two components are always thought of together is singular.
   There *is* a pair of scissors on the table.
   A pair of shoes *costs* much.
   But if you omit the words 'a pair of' and merely use the plural word, then, of course, it must take a plural verb.
   Those scissors *are* costly.
   These shoes *are* new.
16. *A lot of*, *a great deal of, plenty of, most of* and *some of* are singular when they refer to amount or quantity, but plural when they refer to number.
   A lot of work *is* still pending.
   A lot of people *prefer* tea to coffee.
   There are plenty of I.T. courses available now.

17. *Poultry, people* and *cattle* are plural.
    Those poultry *are* mine.
    These people *are* good.
    Whose cattle *are* these?
18. Some nouns which are plural in form, but singular in meaning, take a singular verb: news, politics, economics, physics, ethics, civics, innings, mathematics, etc.
    No news *is* good news.
    Mathematics *is* a very interesting subject.
    The first innings *is* over.
19. Words joined to a singular subject by *with, together with, in addition to*, or, *as well as,* etc., are parenthetical, and therefore do not affect the number of the verb.
    The Chief with his followers *was* present there.
    The cow as well as the horse *eats* grass.
    The President, with the members of the Trust, *has* arrived.
20. *One* should be followed by *one.*
    One should do *one's* duty.
21. The expression *one of* is followed by a plural noun but always takes a singular verb:
    One of my sisters *is* a doctor.
    One of his friends *is* a mill owner.
22. In the present tense of most English verbs the third person singular ends in –s.
    She *speaks* English fluently.
    She dances well.
    My friend *likes* swimming.
23. *None* can take either a singular or plural verb depending on the noun which follows it.
    None + of the + non-count noun + singular verb
    E.g. None of the counterfeit money *has* been found.
    None + of the + plural count noun + plural verb.
    E.g. None of the students *have* finished the exam yet.

EXERCISE

Correct the following sentences using Subject – Verb agreement.

1. The book about the changes in airplanes during the two World Wars were quite interesting. (M.Q.P. 2001)
2. None of the tomatoes was salvaged from the overturned truck. (M.Q.P. 2001)
3. Each are confident that he or she knows all the facts. (M.Q.P. 2001)
4. The cost of the computers are dropping day-by-day. (M.Q.P. 2001)
5. A series of lectures were delivered last month. (Apr. '94)
6. A team of civil engineers have just inspected the site. (Apr. '97)
7. The equipments from Delhi have not arrived yet. (Nov. '97)
8. Either Raja or Mani have taken my key. (Apr. '98)
9. I am now remembering what he said. (Nov. '98)
10. You are ready, isn't it? (Apr. '99)

11. One must do his duty. (Nov. '99)
12. Kumar is one of my good friend. (Oct. 2000)
13. One of the students have a car. (Oct. 2000)
14. Neither his father nor his mother are alive.
15. The difficulty of obtaining pure milk and ghee are great.
16. Iron as well as gold are found in India.
17. Bread and butter are wholesome food.
18. Not one of you have done their work properly.
19. Each of the boys were rewarded.
20. No news are good.
21. These news are good.
22. *Tom Brown's School Days* are highly interesting.
23. One or the other of those fellows have stolen the watch.
24. Each of the suspected men were arrested.
25. The formation of paragraphs are important.
26. Five rupees are an excessive price for this pen-knife.
27. The jury is divided in their opinion.
28. Rama, as well as his brother, have come.
29. Which one of these umbrellas are yours?
30. Three tons of tin costs six hundred pounds.
31. Neither of them are remarkable for precision.
32. Milton was one of the greatest poets that has ever lived.
33. He is one of my best friend.
34. All the food have been wasted.
35. Most of the money have now been spent.
36. All the luggage have now been inspected by the customs officials.
37. Ill news travel fast.
38. A pair of spectacles are lying on the table.
39. There is plenty of books on the subject.
40. Each student have answered the first three questions.
41. A new car cost a lot of money.
42. One of the players come from Coimbatore.
43. Four ounces are the smallest quantity we sell.
44. Ten miles are a long way to walk.
45. The tallest of the three boys live next door to me.
46. The cost of all these articles have risen.
47. Mathematics are his weakest subject.
48. The stationeries have been ordered.
49. His father gave him good advices.
50. Politics are a very interesting subject.
51. Neither side have scored any goal.

CHAPTER

6 Tenses (Simple and Compound Tenses)

A *Verb* is a word or phrase indicating an action, an event or a state.
e.g. eat, run, exist, etc.

Examples
I *speak* English.
We *play* games.
She *wrote* a letter.
They have *completed* the work.
I shall *meet* you tomorrow.

The tense forms of verbs are as follows

1. Simple Present
2. Present Continuous
3. Present Perfect
4. Present Perfect Continuous
5. Simple Past
6. Past Continuous
7. Past Perfect
8. Past Perfect Continuous
9. Simple Future
10. Future Continuous
11. Future Perfect
12. Future Perfect Continuous

I. SIMPLE PRESENT TENSE

The simple present is used:

1. To express a habitual action as,
   (a) He drinks tea every morning.
   (b) My watch keeps good time.
   (c) I go to college by bus.
   (d) He comes here every evening.
2. To express general truths as,
   (a) The sun rises in the east and sets in the west.
   (b) Honesty is the best policy.
   (c) The earth revolves round the sun.
   (d) We see with our eyes.
   (e) Birds fly but cattle don't.

3. To express a situation that is permanent as,
   (a) The Qutab Minar stands near Mehraub in New Delhi.
   (b) Their house faces south.
   (c) The path runs through the forest.
4. To indicate a future event that is part of a fixed programme or time table as,
   (a) The match starts at 10 O'clock.
   (b) The train leaves at 6:10.
   (c) When does the college re-open?
   (d) We leave for Singapore next week.
5. The following verbs (of perception, thinking, emotion, possession) are normally used in the simple present tense.

see	hear	smell	notice
recognise	appear	look	seem
want	wish	desire	feel
like	love	hate	hope
refuse	prefer	think	suppose
believe	agree	consider	trust
remember	forget	know	understand
imagine	mean	mind	own
possess	belong	contain	consist of

Examples

I see a train coming. (not 'I am seeing')
I hear a strange noise in the next room.
I smell something burning.
I notice a change in her behaviour.
He has a car.
My uncle owns a mill.
I have a sister.
Do you recognise me?

EXERCISE I

Fill in the blanks with appropriate form of the verbs.

1. In nature gold _____ (occur) in the metallic state. The extraction of gold _____ (be) a simple process. Most of the impurities _____ (remove) from the freshly mined metal by a simple physical process. (M.Q.P., Apr.'96)
2. The windows _____ (be) open. (M.Q.P.)
3. No one, except his closest friends _____ (support) him.
4. It is I who _____ (be) to blame. (M.Q.P.)
5. A magnet _____ (attract) iron filings. (Apr. ' 97, Nov. '96, Oct. '98)
6. Rice husk _____ (obtain) from rice mills. It _____ (produce) in such a large quantity that its disposal sometimes becomes a problem. When it _____ (sum) under controlled temperature in a furnace it _____ (leave) a residue in the form of a highly reactive ash.

(Apr. '97, Oct. 2000, Oct. '97)

7. Before a house _____ (build) secure foundations _____ (lay). Simply because the foundations cannot _____ (see) by prospective buyers _____ (not mean) that they are not the most important part of the building. (Nov. '97, Apr. '98)
8. Gold _____ (be) important for another reason. The nations of the world _____ (accept) it as a medium of international exchange. (Apr. '98)
9. Raja _____ (go) to bed at 10 O'clock every night. (Apr. '98)
10. The earth _____ (behave) like a huge magnet. (Nov. '98)
11. Iron _____ (expand) when heated. (Apr. '99) (M.Q.P., 2001)
12. Living language, like currency _____ (exist) at two levels. (Apr. 2000)
13. Milk in this vessel _____ (smell) sour. (Oct. 2000)
14. An aluminium bush _____ (house) the bearing. (Apr. 2001)
15. The molten iron which comes from the furnace is _____ (cast) into pigs or ingots. (Apr. 2001)
16. A barometer _____ (need) to measure the atmospheric pressure. (M.Q.P. 2001)
17. _____ science fiction sometimes _____ (come) true? (Apr. '94)
18. During fission, radiation _____ (produce). This radiation _____ (to be) harmful even in small quantities. It _____ (attack) living tissues and it _____ (alter) the genes in body cells. (Apr.'95)
19. _____ (do) you like your present work? (Apr.'95)
20. (a) Most of the husk _____ (use) as fuel and livestock litter.
    (b) When it is difficult to store, the husk _____ (burn). (Oct. '95, Oct. '97)
21. (a) Oil _____ (find) underground trapped in the rock layers.
    (b) When petroleum engineers search for oil they _____ (look) for certain types of rock layers or strata.
    (c) They also set off explosions in the ground and record the waves _____ (reflect) from the underground rock layers.
    (d) This _____ (call) seismic surveying. (Oct. '96)
22. He always _____ (complain) about his health. (Apr. '98)
23. The valve _____ (control) the flow of steam. (Apr. '96)
24. Employees _____ (select) by organizations after an assessment of their skills. (Nov. '96)
25. Today dry cells of different sizes _____ (use) in transistor radios, calculators, portable tape recorders and torches. (Nov. '96)
26. He _____ (go) to bed at nine o' clock every night. (Nov. '96)

II. PRESENT CONTINUOUS TENSE

The present continuous form is

am + (v + ing)
is + (v + ing)
are + (v + ing)

Examples

I am doing my homework.
Mother is cooking food in the kitchen.
They are watching T.V.

The present continuous is used

1. For an action going on at the time of speaking as,
   She is singing.(now)
   They are playing cricket.
2. For a temporary action which may not be actually happening at the time of speaking as,
   I am writing a book. (but I am not writing at this moment)
   I am reading *As You Like It*. (but I am not reading at this moment)
3. For an action that is planned or arranged to take place in the near future as,
   I am leaving for Chennai tonight.
   My brother is arriving tomorrow.

EXERCISE II

1. Now I _____ (write) the English Examination. (Apr.'97)
2. The boys _____ (play) outside at the moment.
3. My sister _____ (sit) in the garden and reading. (M.Q.P.)
4. I _____ (have) a bath at the moment; I cannot open the door.
5. Mother _____ (cook) some food in the kitchen at present.
6. Don't disturb me. I _____ (do) my home work.
7. What _____ you _____ (do) now? (Jan. 2005)
8. I _____ (go) now. Goodbye.
9. Please be quiet. I _____ (work)
10. Where _____ you _____ (go) now?

III. PRESENT PERFECT TENSE

Present Perfect: has + Past Participle: have + Past Participle

The present perfect is used

1. To indicate completed activities in the immediate past as,
   She has just left.
   It has just struck nine.
2. To express past actions whose time is not given and not definite; as,
   I have been to Hyderabad.
   She has passed the examination.
   Have you read *As You Like It*?
3. To describe past events when we think more of their effect in the present than of the action itself as,
   I have informed him.
   She has sold all the books.

4. To denote an action beginning at some time in the past and continuing up to the present moment as,
They have lived here for five years.
I haven't seen Ashok for a long time.
She has been ill since last Monday.

The following adverbs (or adverb phrases) can be used with the present perfect: just, often, never, ever (in questions only), so far, till now, yet (in negatives and questions) already, since-phrases, for-phrases, today, this week, this month, etc.

Examples

He has just come.
I have often told him about it.
I have never seen such a film.
Have you ever been to London?
She has been absent since last Monday.
I have done a lot of work today.

The passive form is more common than the active form.

Additional Examples

Work has been started on the new system of motorways.
Various types of reactors have been designed for different purposes.
Engineers have encountered many problems with this material.
Work on the motorway has not been started yet.
Work on the motorway has already been completed.
The company has just developed a new type of aircraft.

EXERCISE III

1. He _____ just (return) from the U.S. (Nov. '98)
2. These experiments _____ (have) interesting results. (use present perfect) (Apr. '94)
3. Engineers _____ (encounter) many problems with this material. (use present perfect) (Apr. '94)
4. Research so far _____ (show) a possible connection between cancer and smoking. (Nov. '94)
5. No, he isn't here. He just _____ (go) out. (Apr. '98, Apr. '97)
6. Since ancient times gold _____ (catch) the imagination of man by its unique qualities. (Apr. '96)
7. Test borings so far _____ (indicate) the presence of large gas reserves. (in the present perfect tense) (Apr. '96)
8. I _____ (just, complete) first year B.E. (Nov. '96)
9. Test firings so far _____ (indicate)the accuracy of the missile. (Apr. '96)
10. Indian Airlines _____ (introduce) the automatic printing of tickets in major cities. (Apr. '97)
11. Magnets _____ (know) since ancient times.
The earth _____ (behave) like a magnet, and this fact _____ (make) possible the magnet compass. (Apr. '97)
12. The number of jobs _____ (increase) in the technology sector. (Apr. '97)
13. Indian banks _____ (become) very efficient. (Apr. '97)
14. Over the last fifty years, computers _____ (develop) dramatically. (Jan. 2005)

IV. PRESENT PERFECT CONTINUOUS TENSE

Has been + (v+ing)

Have been + (v+ing)

Examples

He has been working in this college since 1990.
They have been living in this house since 1985.
The present perfect continuous is used for an action which began at sometime in the past and is still continuing; as,

Additional Examples

I have been waiting for you since 10 O'clock.
It has been raining since 2 O'clock.
I have been reading this book for 4 hours.

EXERCISE IV

1. Selvi _____ (do) her home work since 6 O'clock. (Nov. '99)
2. She _____ (work) here for the last three years.
3. We _____ (study) English for two years.
4. It _____ (rain) since early morning.
5. I _____ (live) here since 1980.
6. All day today heavy floods _____ (ravage) a number of states in the country. (Apr. '98)

V. SIMPLE PAST TENSE

Verbs like went, ate, wrote, spoke, and did, are in the simple past tense. The simple past is used to indicate an action completed in the past. It often occurs with adverbs or adverb phrases of past time.

Examples

I wrote a letter yesterday.
I met him this morning.
India became independent on 15th August,1947.
She passed the examination last year.
He posted the letter last night.
I received his letter a week ago.
Columbus discovered America.

EXERCISE V

Fill in the blanks with appropriate form of the verbs.

1. Hardy _____ (show) a colleague Ramanujan's strange letter, which _____ (cram) with as many as 60 mathematical theorems and formulas _____ (state) without any proofs. It _____ (not take) them long to realise that Ramanujan was a genius. (Apr.'94)
2. The Egyptians _____ (know) the art of jewellery making as early as 3000 B.C. In ancient India too skilled craftsmen _____ (make) exquisite gold ornaments. (Apr.'98)
3. She _____ (go) abroad last month. (Apr.'98)
4. (a) On the farms, the hens _____ (brood), but no chicks hatched.
   (b) The farmers complained that they _____ (are) unable to raise.

(c) The apple trees _____ (come) into bloom but no bees droned away the blossoms.

(d) So there was no pollination in the apple trees and there _____ (will) no fruit. (Apr. '96)

5. In 1715, off the coast of Florida, a convoy of Spanish ships _____ (strike) by a storm. Some of the ships _____ (sink) and nearly a thousand people _____ (die). Eighteen years later, a storm struck another convoy which _____ (set out) from Havana only a couple of days before. (Oct. '96)
6. He _____ (go) abroad last week. (Oct. '97)
7. The design for the Calcutta Metro projects track _____ (finalise) in consultation with the Railway's design organisation at Lucknow. The technical know-how for the assembly _____ (base) on the Budapest Metro and also the U.K. practice. Different layouts _____ (try) out and in all of them grooved rubber pads between rail and sleeper, and sleeper and concrete bed _____(fix). (Apr. '96)
8. In 1917 Indian Airlines _____ (acquire) one more IBM 1401 system. (Apr. '97)
9. Last year Indian Airlines _____ (arrange) for provision of data on a day-to-day basis. (Apr. '97)
10. I _____ (be) an employee of the Central Government. I _____ (start) my career in Bombay in 1955. In 1970 I _____ (get) a transfer to Calcutta. Now I _____ (work) in Chennai. (M.Q.P.)
11. Kamala _____ (be) a teacher. In 1970 she _____ (start) her career in Sri Lanka. She _____ (migrate) to India in 1995. Presently she _____ (work) in Delhi. (Nov./Dec. 2002)
12. Rajesh _____ (work) as a farmer in a village near Salem till June 1990. In July 1990, he _____ (change) his profession. After the change he _____ (migrate) to Chennai and through hard work he became rich. At present, he _____ (be) the owner of two factories in the city. (Apr./May 2003)
13. Sir Benjamin Baker _____ (be) a British civil engineer. He _____ (be) an expert in bridges. Before the age of twenty he _____ (learn) all about steel and iron. A practical man, he never _____ (leave) anything to chance. He _____ (insist) on carrying out exact tests on every piece of steel or iron. He _____ (write) a book about cantilever bridges. He _____ (win) a reputation for brilliance in the engineering profession. He _____ (help) in building new underground railways in London. He _____ (build) the famous Aswan Dam in Egypt.
14. Over the last forty years computers _____ (develop) dramatically. The first computers _____ (can do) relatively few calculations a second, whereas the present mainframe can carry out many instructions per second. In the past only highly _____ (train) computer experts _____ (are) able to use computers. (Apr.'96)
15. Magnets _____ (know) since classical times; their name _____ (derive) from Magnus in Greece, when magnet stones _____ (find) at one time. (Apr.'96)

VI. PAST CONTINUOUS TENSE

Past Continuous = was / were + (v+ing)

The past continuous is used to denote an action going on at some time in the past. The time of the action may or may not be indicated.

Examples

It was getting late.
They were playing cricket.
When I met him, he was watching T.V.
While he was crossing the road, he was run over by a lorry.

EXERCISE VI

1. What _____ (you/do) at 2 O'clock this morning?
2. When the phone rang, he _____ (read).
3. He _____ (read) a newspaper when I went to see him. (Oct. 2000)
4. While she _____ (drive) to her office, she saw an accident. (Apr.'97)
5. (a) What _____ you _____ earlier? (do)
   (b) I _____ the lands which I own in my village. (plough) (Apr. '95)
6. Yesterday the students _____ (clean) the campus between 2 p.m. and 4 p.m. (use past continuous tense). (Apr.'96)
7. As the pilot _____ (prepare) for touch–down, the air traffic controller _____ (tell) him that the runway was blocked. (Apr. '96)
8. The worker _____ operate the lathe continuously for four hours last week. (use past continuous tense) (Apr.'96)
9. He _____ (drive) the car at a speed of 80 km an hour. (Nov.'96)

VII. PAST PERFECT TENSE

Past Perfect tense = had + Past Participle

The past perfect describes an action completed before a certain moment in the past.

I worked in Erode Arts College. Before that I had worked in Loyola College, Chennai.

The patient had died before the doctor arrived. (= The patient died first.)

If two actions happened in the past, the past perfect tense is used for the action which happened earlier than the other. For the action which happened later, the Simple Past is used.

Examples

When I reached the station, the train had already left.

He had done the work before his father arrived.

EXERCISE VII

1. She told me his name after he _____ (leave). (Nov.'98, Apr.'97)
2. When we arrived, the dinner already _____ (begin). (Nov.'96, Apr.'98)
3. After they _____ (go), I sat down and rested.
4. Did you post the letter after you _____ (write) it?
5. She said she already _____ (see) the temple. (Apr.'97, Oct.'98)
6. A war _____ (break) out if the UN had not intervened. (Nov.'96, Apr.'97, Oct.'98)
7. If the weather had been finer, the match _____ (take place). (Apr.'98)
8. When the cinema collapsed last night, several people _____ (kill). Many more _____ (kill) if the tragedy _____ (occur) half an hour later when the main film was due to _____ (show) (Nov.'96, Oct.'98).

VIII. PAST PERFECT CONTINUOUS TENSE

The past perfect continuous is used for an action that began before a certain point in the past and continued up to that time.

Examples

At that time he had been working there for five years.

When Mr. Alex came to the college in 1990, Mr. Peter had already been teaching there for ten years.

IX. SIMPLE FUTURE TENSE

The simple future is used for an action that has still to take place.

Examples

I shall meet you tomorrow.
Tomorrow will be Monday.
I shall be forty next birthday.
He will come tomorrow.

Note: We do not use will or shall for things we have arranged or decided to do.

We're going to the cinema on Saturday.

I'm not working tomorrow.

EXERCISE VIII

1. I think she _____ (pass) the examination.
2. It is very cloudy and I am sure it _____ (rain). (Apr.'97)
3. The time may come when _____ (own) a computer will become as common as _____ (own) a wrist watch. In future houses may _____ (erect) with built in computers _____ (execute) a wide variety of tasks. (Apr.'94)
4. Railways and roads must _____ (build) in developing countries so that earth moving equipment for the establishment of industries can easily _____ (transport). If the road and railways are well _____ (maintain), then the products can _____ (distribute) quickly. (Nov.'96)

X. FUTURE CONTINUOUS TENSE

The future continuous represents an action as going on at some time in the future.

Examples

When I get home, my dog will be sitting for me at the door.

He will be staying with us till Sunday.

EXERCISE IX

1. How long _____ you _____ (stay) in Paris?
2. The train _____ (leave) in ten minutes.
3. I _____ (see) him tomorrow.
4. I _____ (stand) under the station clock when you arrive.
5. Tomorrow at this time I _____ (write) my English examination.

XI. FUTURE PERFECT TENSE TENSE

The Future Perfect is used to indicate the completion of an action by a certain future time as.

Examples

I shall have completed the work by that time.

Before you go to see him, he will have left the place.

EXERCISE X

1. They _____ (lay) the road by next August. (Apr.'97)
2. The rain _____ (stop) by the time we reach home. (Nov.'98, Oct.2000, Oct.'97)
3. They _____ (complete) the work by next year. (Apr.'99, M.Q.P.2001)
4. By next June he _____ (finish) his course. (Nov.'96, Arp.'97)

XII. FUTURE PERFECT CONTINUOUS TENSE

The Future Perfect Continuous indicates an action represented as being in progress over a period of time that will end in the future.

Examples

By next August we will have been studying in this college for two years.

On his next birthday, he will have been living in that house for ten years.

EXERCISE XI

Fill in the blanks with suitable passive forms of verbs given in brackets.

1. When rice husk _____ (burn) in the open or under controlled temperature in a furnace, it leaves a residue in the form of a highly reactive ash. This ash when it _____ (mix) with lime, acquires cement like properties and has the potential to replace portland cement either fully or partially in certain construction works. The cement produced from rice husk _____ (mix) with sand to prepare mortar which can _____ (use) for plastering purposes, etc.
2. To make the leaf protein, fresh green leaves _____ (feed) into the machine through a feed hopper and _____ gradually _____ (move) along by a helical screw. The lower part of the cylindrical outer casing _____ (perforate) to allow the juice to _____ (squeeze) out into a container.
3. The roller on the machine _____ (ink) and the roller _____ (rotate) either by hand or by means of an automatic device.
4. Corrections _____ (carry) out on the stencil. The stencil paper _____ (place) in position on the duplicating machine.
5. The stencil paper _____ (remove) from the machine and _____ (store) for future use.
6. This _____ (do) by painting the correcting fluid on the mistakes.
7. The letter should _____ (type) on stencil paper, setting the typewriter to the stencil-cutting position.
8. The type _____ (make) by pouring molten type metal into the mould.
9. Typesetting _____ (do) by hand and the types _____ (wedge) together in a tray.
10. Ink _____ (spread) on the type and then the paper _____ (press) against the types.
11. Then the plate _____ (wet).

12. When greasy printing ink _____ (apply) to the plate, it sticks to the greasy image but not to the non-printing areas.
13. From this plate, the image can _____ (print) on paper.
14. The Nanda Devi sanctuary _____ (make) out of bounds for outsiders.
15. An Army expedition _____ (send) to clean up this biosphere reserve in 1993.
16. It _____ (seal) totally from external contamination.
17. It _____ (manufacture) easily by small units in India.
18. Currently, it _____ (consider) the ideal solution.
19. The pump _____ (can, motorise).
20. This pump _____ (can, maintain) by the users themselves.
21. The faults in pumps _____ (may not always, cause) by substandard materials.
22. In the first method, a frothing agent _____ (add) to produce a foam.
23. A collecting agent _____ (use) to produce a film on the gold, which then sticks to the air bubbles.
24. The gold thus obtained _____ (smelt) and cast into bars.
25. The uranium fuel _____ (keep) in the reactor's core.
26. The reactor _____ (control) by control rods which _____ (can, drive) into and out of the core.
27. Exhaust steam _____ (convert) back into water by means of a condenser which uses water from a cooling tower.
28. The cold water _____ (circulate) by a feed water pump back through the hot part of the reactor.
29. Most of the impurities _____ (remove) from the freshly mined metal by a simple physical process. (M.Q.P. Apr.'96)
30. The molten iron which comes from the furnace _____ (cast) into pigs or ingots. (Apr. 2001)
31. Work _____ (has start) on the new system of motorways.
32. Various types of reactor _____ (have, design) for different purposes.
33. The clay used by Spartek is really sediment deposits which _____ (collected) at the bottom of irrigation tanks. This mined clay _____ (bring) to the Tirupathi plant and _____ (mix) with other ingredients and _____ (wetgrind) into a fine slip. (Apr./May 2003)
34. Supply the correct forms of the verbs given in brackets.

    The man (stop) the car and (come) to me. He (say) that he (not see) me because he (been) lost in the admiration of the scenery. He (take) out his wallet and (give) me some money. He said that the dog was dead and there was nothing we (can) do about it. (Nov./Dec. 2004)

CHAPTER

7 Simple, Complex and Compound Sentences

1. A simple sentence has only one finite verb.

Examples

I am a student.

She can speak English fluently.

Note : (i) 'to + verb' is not a verb (to go, to do)

(ii) 'v+ing' is not a verb (going, doing)

2. A complex sentence has

(i) at least 2 verbs

(ii) one main clause and one or more subordinate clause.

(a) A main clause gives complete meaning:

Example

I have passed the examination.

(b) A subordinate clause does not give complete meaning:

Examples

As he was late

If you work hard

Though he bought the book

3. A compound sentence has

(i) atleast 2 verbs

(ii) atleast 2 main clauses

A co-ordinating conjunction : and, but, yet, still etc.

Examples

He worked hard and passed the examination.

He bought the book but he did not read of.

IMPORTANT RULES

Rule I

Compound	:	but, yet, still
Complex	:	though, although, even though
Simple	:	in spite of, despite

Examples

He bought the book but he did read it. (Cd)

Though he bought the book, he did not read it. (Cx)

In spite of buying the book, he did not read it. (S)

EXERCISE I

Rewrite as directed:

1. He is popular, yet he cannot be called a great speaker. (change into a complex sentence)
2. They tried their best, yet they could not complete the work. (change into a complex sentence)
3. He earned a lot of money, but he spent a little. (change into a complex sentence)
4. In spite of illness, he wrote the test. (change into a compound sentence)
5. Though he is rich, he is not happy. (change into a compound sentence)
6. She is very poor, yet she is contented. (change into a complex sentence)
7. She is very rich but she is very simple. (change into a complex sentence)
8. In spite of her ill health, she looks cheerful. (change into a compound sentence)
9. In spite of his poverty, he is happy. (change into a complex sentence)
10. For all this riches, he is not contented. (change into a compound sentence)
11. In the face of many obstacles, he persevered. (change into a compound sentence)
12. The captain made every effort nevertheless he failed. (change into a simple sentence)
13. For all her riches, she is discontented. (change into a complex sentence)

Rule II

Compound : and

Complex : When, After

Simple : v+ing/on + (verb=ing)

Example

He saw me and greeted me. (Cd)

When he saw me, he greeted me. (Cx)

On seeing me, he greeted me. (S)

EXERCISE II

Rewrite as directed:

1. When the cat is away, the mice will play. (change into a simple sentence)
2. When a district is flooded, it becomes an archipelago. (change into a simple sentence)
3. He increased his speed and caught up with me. (change into a simple sentence)
4. She had promised to lend him her book. So she revised her lessons quickly. (change into a simple sentence)
5. Rushing against his enemy, he killed him with his spear. (change into a compound sentence)
6. You must hire a taxi to catch the train. (change into a compound sentence)
7. The sun having set, the stars appeared in the sky. (change into a compound sentence)
8. Having described the portrait, he took up the next one. (change into a compound sentence)
9. I saw the snake and I ran away. (change into a simple sentence)
10. The sun rose and the fog disappeared. (change into a simple sentence)

11. He raised his voice and shouted at me. (change into a simple sentence)
12. In the absence of the cat, the mice will play. (change into a complex sentence)
13. On seeing the unsold ugly daub, Mrs. Hibbert she had a dreadful qualm. (change into a complex sentence)

Rule III

Simple : too … to
Complex : so … that … not
Compound : very, extremely etc

Examples

1. He is too old to walk. (S)
   so … that … cannot (vb : present tense)
   could not (vb: past tense)
   He is so old that he cannot walk. (Cx)
   He is very old and therefore he cannot walk. (Cd)
2. He was too late to catch the bus. (S)
   He was so late that he could not catch the bus. (Cx)
   He was very late and so he could not catch the bus. (Cd)
3. The tea is too hot for me to drink. (S)
   for me = I ; for us = we; for you = you;
   for him = he ; for her= she; for it=it;
   for them=they; for John = John; for the thief = the thief, etc.
   The tea is so hot that I cannot drink it. (Cx)
   The tea is very hot and I cannot drink it. (Cd)

EXERCISE III

I. Transform the simple sentences into complex sentences.

1. The problem was too difficult for him to solve.
2. The wall was too high for the thief to climb over.
3. He is too honest to be a successful business man.
4. It is too good to be true.

II. Transform the simple sentences into compound sentences.

1. He is too weak to walk.
2. The story is too strange for me to believe.

Rule IV

S = besides
Cd = not only – but also

Example

Simple : Besides robbing the poor child, he also murdered her.
Compound : He not only robbed the poor child but also murdered her.

EXERCISE IV

Transform the simple sentences into compound sentences.

1. Besides being a teacher, she is a journalist.
2. Besides buying a new car, she learned how to drive it.
3. Besides educating his nephew, he set him up in business.
4. Besides being a good batsman, he is a good bowler.

Rule V

Cd : v+.... and ....

Cx : if you ....

S : in the event of/in case of

Example

Cd : Work hard and you will pass.

Cx : If you work hard, you will pass.

S : In the event of working hard, you will pass.

Rule VI

Cd: or, or else

Cx : if you ....not (=less)

S : without, in the event of not

Examples

1. Cd : Work hard or you will fail.
   Cx : If you do not work hard, you will fail.
   (or)
   Unless you work hard you will fail.
   S : Without hard work (=working hard), you will fail.
2. S : Without your help, I can do nothing.
   Cx : Unless you help me, I would do nothing.
3. Cx : If you had not helped me, I would have been ruined.
   S : Without your help, I would have been ruined.
4. Cd : Do it correctly or you will not be selected.
   S : In the event of not doing it correctly, you will not be selected.
5. Cx : If you do not hurry, you will miss the train.
   Cd : Hurry up or you will miss the train.

Rule VII

Cd : At once, just then, immediately
Cx : As soon as
S : Immediately after + (v+ing)

Example

Cd : He received the telegram and at once he left for his native place.

Cx : As soon as he received the telegram, he left for his native place.

S : Immediately after receiving the telegram, he left for his native place.

Rule VIII

Cd : and so, and therefore

Cx : As

S : Being / (v+ing)

Examples

1. Cd : He was poor and so he could not buy new clothes.

   Cx : As he was poor he could not buy new clothes.

   S : Being poor, he could not buy new clothes.
2. The rain had stopped, so we decided to continue our trip. (change into simple sentence)

   The rain having stopped, we decided to continue our trip.
3. Not knowing anyone in the town, he went to stay in a hotel. (change into compound sentence)

   He did not know anyone in the town and therefore he went to stay in a hotel.
4. The books being low-priced, I bought ten copies of them. (change into compound sentence)

   The books were low-price and so I bought ten copies of them.
5. Owing to his illness, he remained at home. (change into compound sentence)

   He was ill and so he remained at home.

Additional Examples

(a) Change into complex sentences

1. We heard of his success.

   We heard that he had succeeded.
2. To escape punishment you must confess your fault.

   If you want to escape punishment, you must confess your fault.
3. Do it to the best of your ability.

   Do it as best as you can.

   (or)

   Do it as best as you are able to (do)
4. The people in the gallery could hear her well.

   The people who were in the gallery could hear her well.
5. An honest man is the noblest work of God.

   A man who is honest is the noblest work of God.

6. The date of his arrival is uncertain.
   It is uncertain when he will arrive.
7. Tell me your name.
   Tell me what your name is
8. Everyone praised Hari for his honesty
   Everyone praised Hari because he was honest.

(b) Change into simple sentences

1. He admitted to his employer that he had made a mistake.
   He admitted his mistake to his employer.
2. Time which is lost is lost forever.
   Time lost is lost forever.
3. A man who is honest is the noblest work of God.
   An honest man is the noblest work of God.
4. The law will punish who ever is guilty.
   The law will punish the guilty.
5. We could not make out what those lines of poetry meant.
   We could not make out the meaning of those lines of poetry.
6. Delhi, which is the capital of India, is situated on the Jamuna.
   Delhi, the capital of India, is situated on the Jamuna.
7. The criminal confessed that he was guilty.
   The criminal confessed his guilt.
8. If weather permits. I shall go out.
   Weather permitting. I shall go out.
9. What she spoke on that occasion was unworthy of him.
   Her speech on that occasion was unworthy of him.
10. Sarojini Naidu was the first lady who become a Governor.
    Sarojini Naidu was the first lady to become a Governor.

CHAPTER

8 Impersonal Passive Voice

In the Impersonal passive voice the agent (with 'by') is omitted.

Rule I

Active Voice : Subject + Verb + Object + Other words
Passive Voice : Object + Verb + Past Participle + Other words

Examples

1. They sell radios here.
   Radios are sold here.
2. They opened the theatre only last week.
   The theatre was opened only last week.

EXERCISE I

Change into impersonal passive statements.

1. They constructed this house forty years ago. (Nov.'99)
2. We call these supports bearings. (Apr.'99)
3. We boil a little water in a tin can until the steam fills the can. (Nov.'98)
4. I took 20 ml. of the solution in a test tube. (Apr.'98)
5. The lorry carries the load to the factory.
6. He lubricated the ball-bearing.
7. Doctors use a clinical thermometer to measure body temperature.
8. They pass the gas through a water container.
9. We keep the cash in the box.
10. We clamp the two metal plates together. (Oct.'97, Nov.'96)
11. Coal miners produce millions of tons of coal every week.
12. Welders normally prefer a vee-shaped weld.
13. The country does not produce any heavy industrial machinery.
14. They made expenditions into the middle and west of the country, often under the most difficult conditions. (Apr. 2001)
15. We use the community-type hybrid solar cooker for cooking a large quantity of food. (Apr.'95)

Rule II

A.V. = S + can + Verb (Present Tense) + Object + other words
could
shall
should, etc.

P.V. = O + can be + Past Participle + O.W.
could be + Past Participle

Examples

1. We can do this work now itself.
   This work can be done now itself.
2. They may construct a bridge across the river.
   A bridge may be constructed across the river.

EXERCISE II

Change into impersonal passive statements.

1. A skilled operator can carry out many operations on the lathe. (M.Q.P., Apr. 2001)
2. You must take care not to damage the machinery. (M.Q.P., Apr. '94, Apr. '96, Apr. '97, Oct. '98)
3. You can lubricate low-speed bearings with grease. (Apr. 2000)
4. You may generate heat for welding in several ways. (Apr. 2000)
5. This will prevent damage to the shaft. (Nov. '99)
6. We can generate heat for welding in many ways. (Apr. '97, Apr. '98)
7. We can cast this type of metal into very complicated shapes. (Apr. 2000, Apr. 2001)
8. A lathe can cut screws.
9. The students must take care not to damage the spanner.
10. We must listen to his words.

(These sentences are taken from A.J. Herbert's *The Structure of Technical English*, Pages 28-29)

Rule III

Active Voice : S + has + P.P. + O + O.W.
have + P.P. + O + O.W.
had + P.P.

Passive Voice : O+ has been + P.P. + O.W.
have been + P.P
had been + P.P.

Examples

1. They have announced the results.
   The results have been announced.
2. They have bought a car.
   A car has been bought.
3. He had informed his friend.
   His friend had been informed.

EXERCISE III

Change into impersonal passive statements.

1. The operator has set right the malfunctions of the telephone. (Apr. 2000)
2. They have made a mistake in passing these orders. (Nov. '99)
3. The police have arrested yet another fraudulent finance company proprietor. (Apr. '99)
4. They have installed a new computing machine in the accounts section.
5. They have successfully performed the operation.
6. The new manager has called for quotations.
7. They have increased the rate of interest.
8. They had exhausted the supply of wine. (Apr. 2001)
9. The writer has focussed attention on the emerging trends of technology. (M.Q. P., 2001)
10. We have introduced several innovations in the design of the latest automobile. (Nov. '94)

Rule IV

A. V. =ing, P. V.= being
Active Voice : S + V+ (V + ing) + O + O.W.
Passive Voice : O + V + being + P.P. + O.W.

Examples

1. They are conducting tests.
   Tests are being conducted.
2. He is answering questions.
   Questions are being answered.
3. She was typing letters.
   Letters were being typed.

EXERCISE IV

Change into impersonal passive statements.

1. They are constructing a new bridge across the river. (Apr. '99)
2. They are closing the inlet port.
3. We are making an efficiency test.
4. They are testing the new machine.
5. In this day and age, the computer is finding more applications than were ever conceived possible. (M.Q.P., 2001)

Rule V

Active Voice V+ O + O.W.
Passive Voice Let + O + be + P.P + O.W.

Examples

1. Open the door.
   Let the door be opened.
2. Inform him.
   Let him be informed.

EXERCISE V

Change into impersonal passive statements.

1. Take the temperature.
2. Find out the expansion of the metal.
3. Increase the temperature.
4. Calculate the rate of change of momentum.
5. Take care not to damage the machines. (Apr. 2001)

Rule VI

Active Voice ?
Passive Voice ?

Examples

1. How can you do this ?
   How can this be done ?
2. Why did you change the plug ?
   Why was the plug changed ?

EXERCISE VI

Change into impersonal passive forms.

1. How can you do it ?
2. Why did you do it ?
3. Will they sell their car ?
4. Should you see this film ?
5. Did you inform him ?
6. Have you posted the letters ?

CHAPTER

9 Use of Conditionals

Usually conditional sentences contain the word '*if*'.

The following are the various kinds of conditional or *'if'* clauses.

I. Open condition

Open condition, i.e., a condition which may or may not be fulfilled.
If it rains, the match will be cancelled.
(It may rain, or it may not; we do not know)
If I have the time, I will go.
(I will go unless I don't have time)
If my headache disappears, we can play tennis.
(I will play tennis unless I have a headache)

The open condition is also called possible or probable condition.
The '*if*' clause can come first or last in the sentence with no change in meaning.
Notice that when the *'if'* clause comes first, it is followed by a comma.

If you work hard, you will pass.
If I am free, I'Il meet you.

Formula

If + Subject + Verb (Present Tense) + Other Words,
Subject + will + Verb + Other Words
may + V
can + V
shall + V

Examples

I. If you do it, you will be happy.
If he buys the book, he will read it.
If they have the money, they will buy a car.
(or)
Subject + will + V
may + V + Other Words, if + Subject + Verb (Present Tense) + Other Words
can + V
shall + V

II. You will pass, if you work hard.
You will fall ill, if you drink dirty water.
I'Il buy the cassette, if I go there.

Additional Examples

1. If the train is late, we'll walk.
2. She'll call you if she has time.
3. If it costs too much, I shall buy a smaller one.
4. If the class is full, we'll find another one.
5. What will we do if the taxi doesn't come?
6. Will you phone me if there are any problems?
7. I'll go next week, if I can get a train ticket.
8. If he sees me here, he will be really angry.
9. Mary will be worried if you don't come to the airport.
10. If it snows this winter, we'll go skiing.
11. I'll lend them some money, if they ask me.
12. If you visit Oxford, you'll see some interesting old buildings.
13. If I have time, I shall visit the exhibition.
14. If I see a suitable present for her, I shall buy it.
15. If I have the money, I shall buy a new car.
16. If the weather is good, I shall go for a walk.
17. Unless the weather is good, I shall stay at home.
    Notice that 'unless' is equivalent to 'if …… not'.
    Unless you work hard, you will not pass.
    If you do not work hard, you will not pass.

EXERCISE I

Complete the following.

1. If drivers do not obey traffic regulations, _____.
2. If the engine is serviced regularly, _____. (Apr./May 2004)
3. If the battery of the car is 'down', _____. (Nov./Dec. 2003)
4. If passengers stand on the footboards of buses, _____. (Apr./May 2004)
5. _____, the aeroplane cannot take off. (Nov./Dec. 2003)
6. If there are more pedestrians on the roads, _____.
7. If the weather is rough, _____. (M.Q.P.,2001)
8. _____, the tyre will be damaged. (M.Q.P., 2001)
9. If there is a power breakdown, _____. (Nov. '99)
10. Unless the water is pure, _____. (Oct. 2000)
11. If you don't apply lubricant to a machine periodically, _____.
12. If the coolant is not circulated in the core of the reactor, _____. (Apr. '97)
13. If the supply of lubricant fails, _____. (Apr.'99)
14. If you burn coal, _____.
15. _____, the generator will automatically come into operation.
16. _____, emergency controls will operate immediately.
17. If the nucleus contains an excess of neutrons, _____.
18. _____, if the uranium is fissioned.

19. _____, if the quality of steam flowing through the cylinders is increased.
20. Unless the steam is superheated, _____.
21. _____, the pressure at any part of the stroke may be measured.
22. If current is passed through a solenoid, _____.
23. If no external forces act on a system, _____.
24. _____, unless the isotopes are shielded properly.
25. A sudden loss of lift will be experienced, _____.
26. The conveyor belt will be liable to slip off the drive, _____.
27. If the fuel reaches this critical temperature, _____.
28. _____, the temperature at the turbine will be too high.
29. The mixture may ignite spontaneously, _____.

(Sentences 15-29 are taken from A.J. Herbert's *The Structure of Technical English,* page106).

II. Improbable or rejected condition

The verb in the conditional clause is generally in the simple past tense, and the verb in the main clause is generally 'would or should'.

Conditional sentences of this type are used:

When the supposition is contrary to known facts, as in:

e.g. If he decided to work systematically, he would pass the examination.
(but we know he cannot decide)
If he ran all the way, he would catch the train. (but he doesn't)

Formula

If + Vb. (Past Tense) + O.W.,S + would + Vb (Present tense) + O.W.
could
might
should

Examples

If I lived by the sea, I would do a lot of swimming.
If they asked me to work for them, I might accept.

EXERCISE II

Complete the following.

1. _____, I would go to the beach with you this weekend.
2. If you behaved in a foolish manner, _____.
3. If I went to Delhi today, _____.
4. If he stopped smoking, _____.
5. If you ate so much every day, _____.

III. Impossible condition

The condition expressed by this type may be called 'impossible' condition. This kind of condition cannot at all be fulfilled. The verb in the conditional clause is in the past perfect tense (had + Past Participle), and the verb in the main clause is generally 'would/ should have + Past Participle'.

Formula

If + S + had + Past Participle + Other Words, S + would have + Past Participle + Other Words.

Example

If he had worked hard, he would have passed the examination.
(He did not work hard and so he did not pass the examination).

Note : It is also possible to indicate a past unreal condition without using the word *if*. In this case, the auxiliary *had* is placed before, rather than after, the subject.

Had he worked hard, he would have passed the examination.

Formula

Had + S + Past Participle…

Examples

Had we known that you were there, we would have written you a letter.
Had she found the right buyer, she would have sold the house.
Had I not seen it with my own eyes, I would not have believed it.

EXERCISE III

Complete the following.

1. _____, he would have driven it.
2. If the Chairman had not told us, _____.
3. _____,our picnic would have been a great success.
4. Had you done as I told you, _____.
5. If they had taken my advice, _____.
6. If he had been more careful, _____.
7. If only we had been two minutes earlier, _____.
8. If the electricity had not failed, _____.
9. _____, the manager would have rewarded you.
10. Had I known it, _____.
11. He would have gone to the party _____. (Apr.'94, Nov. '99)
12. A war would have broken out _____. (Apr.'97)
13. If his brother had been driving, _____. (Nov.'98, Oct. 2000)
14. Had it rained, _____. (Apr. 2000)
15. If there had been no rains last month, _____. (M.Q.P.)

IV. Imaginary condition

Imaginary or unreal condition, i.e. one which could not be true (If I were you), or which, even if it is not impossible, is not seriously contemplated, but is only advanced for the sake of argument.

If I were a millionaire _____
If I were rich _____

In the unreal condition the past tense of *be* is always *were* in a conditional sentence,

If I were _____
If we were _____

If he were _____
If she were _____
If it were _____
If you were _____
If they were _____

If I were rich, I would travel around the world. (I am not rich) (I'm *not* going to travel around the world)

If he were sick, he would stay home today.

(He's *not* sick) (He's *not* going to stay home today)

Formula

If +Subject, were + Other Words, S + would + verb (Present tense) + Other Words.

EXERCISE IV

Complete the following.

1. If he were a king, _____.
2. _____, I would own a bungalow.
3. If he were here, _____.
4. If I were the Minister of Commerce, _____.
5. _____, I would meet my friends.
6. _____, they would buy many things.
7. If I were the Prime Minister of India, _____.
8. If there were no politicians to tempt people _____. (M.Q.P.)
9. If there were no pedestrians on the roads, _____.

CHAPTER

10

Comparative Adjectives (Affirmative and Negative)

An *Adjective* is a part of speech that adds more meaning(qualifies) to a noun.E.g. Gopal is a *good boy*.

Similarly an *Adverb* is a word that adds more meaning to a verb.E.g. Jack walked *very fast* to his office.

There are three degrees of comparison of Adjectives and Adverbs: Positive, Comparative and Superlative

Rule I Irregular Comparison

The following Adjectives are compared *irregularly*, that is, their Comparative and Superlative are not formed from the Positive.

Positive	Comparative	Superlative
Bad	worse	worst
Evil	worse	worst
Far	farther	farthest (distance)
Fore	former	foremost, first
Good	better	best
Ill	worse	worst
In	inner	inmost, innermost
Little	less, lesser	least
Late	later, latter	latest, last
Much	more	most (quantity)
Many	more	most (number)
Nigh	nigher	nighest, next
Old	older	oldest
Old	elder	eldest
Out	outer, utter	utmost, uttermost
Up	upper	upmost, uppermost
Well	better	best

Rule II We form Comparative by adding '-er' and the Superlative by adding '-est'.

Positive	Comparative	Superlative
Bold	bolder	boldest
Bright	brighter	brightest
Black	blacker	blackest
Clever	cleverer	cleverest
Cool	cooler	coolest
Close	closer	closest
Cheap	cheaper	cheapest

Deep	deeper	deepest
Fast	faster	fastest
Few	fewer	fewest
Great	greater	greatest
Gay	gayer	gayest
High	higher	highest
Kind	kinder	kindest
Large	larger	largest
Low	lower	lowest
Near	nearer	nearest
Narrow	narrower	narrowest
Pure	purer	purest
Quiet	quieter	quietest
Sweet	sweeter	sweetest
Small	smaller	smallest
Smooth	smoother	smoothest
Strong	stronger	strongest
Shallow	shallower	shallowest
Simple	simpler	simplest
Tall	taller	tallest
Thick	thicker	thickest
Young	younger	youngest

Rule III When the Positive ends in 'e' only 'r' and 'st' are added.

Positive	Comparative	Superlative
Able	abler	ablest
Brave	braver	bravest
Fine	finer	finest
Large	larger	largest
Noble	nobler	noblest
Rude	ruder	rudest
Safe	safer	safest
True	truer	truest
Wise	wiser	wisest
White	whiter	whitest
Wide	wider	widest

Rule IV When the Positive ends in 'y', preceded by a consonant, the 'y' is changed into 'i' before adding 'er' and 'est'.

Positive	Comparative	Superlative
Busy	busier	busiest
Costly	costlier	costliest
Dry	drier	driest
Easy	easier	easiest
Greedy	greedier	greediest
Gloomy	gloomier	gloomiest

Healthy	healthier	healthiest
Heavy	heavier	heaviest
Happy	happier	happiest
Merry	merrier	merriest
Pretty	prettier	prettiest
Sturdy	sturdier	sturdiest
Ugly	uglier	ugliest
Wealthy	wealthier	wealthiest

Rule V When the Positive is a word of one syllable and ends in a single consonant preceded by a short vowel, this consonant is doubled before adding 'er' and 'est'.

Positive	Comparative	Superlative
Big	bigger	biggest
Fat	fatter	fattest
Hot	hotter	hottest
Red	redder	reddest
Sad	sadder	saddest
Thin	thinner	thinnest
Wet	wetter, more wet	wettest

Rule VI When the Positive is a word of more than two syllables, we add 'more' to the Positive to form the Comparative and 'most' to form the Superlative.

Positive	Comparative	Superlative
Attractive	more attractive	most attractive
Agreeable	more agreeable	most agreeable
Beautiful	more beautiful	most beautiful
Believable	more believable	most believable
Courageous	more courageous	most courageous
Cautious	more cautious	most cautious
Compact	more compact	most compact
Difficult	more difficult	most difficult
Delightful	more delightful	most delightful
Efficient	more efficient	most efficient
Excellent	more excellent	most excellent
Exact	more exact	most exact
Fortunate	more fortunate	most fortunate
Feasible	more feasible	most feasible
Hated	more hated	most hated
Hopeful	more hopeful	most hopeful
Honest	more honest	most honest
Intelligent	more intelligent	most intelligent
Important	more important	most important
Interesting	more interesting	most interesting
Interested	more interested	most interested
Industrious	more industrious	most industrious
Learned	more learned	most learned

Numerous	more numerous	most numerous
Proper	more proper	most proper
Pleasant	more pleasant	most pleasant
Patient	more patient	most patient
Powerful	more powerful	most powerful
Professional	more professional	most professional
Reluctant	more reluctant	most reluctant
Reliable	more reliable	most reliable
Splendid	more splendid	most splendid
Severe	more severe	most severe
Shameful	more shameful	most shameful
Stupid	more stupid	most stupid
Traditional	more traditional	most traditional
Timid	more timid	most timid
Useful	more useful	most useful
Unjust	more unjust	most unjust
Valuable	more valuable	most valuable
Wonderful	more wonderful	most wonderful

Examples

I. Fill in the blanks in the following sentences with the comparative forms of the adjectives given in bracket. (M.Q.P.)

(a) Diesel is heavier (heavy) than petrol.
(b) Diesel costs less (little) than petrol.
(c) Pressurised heavy water reactor is smaller (small) than fast breeder reactor, and is, therefore more compact (compact) than the other.

II. Fill in the blanks in the following sentences with the comparative forms of the adjectives given in brackets. (Nov./Dec. 2002)

(a) Lead is heavier (heavy) than aluminium.
(b) Gold is more expensive (expensive) than silver.
(c) The process of extraction of oil is simpler (simple) than the process involved in prospecting for oil.
(d) The disposal of nuclear wastes causes greater (great) problems when compared to the production of nuclear energy.

III. Fill in the blanks in the following sentences with the comparative forms of the adjectives given in brackets. (Apr./ May 2003)

(a) Nylon is harder (hard) than rubber.
(b) Platinum is more expensive (expensive) than gold.
(c) Today, making investments in landed property is wiser (wise) than investing in articles of gold.
(d) In mountain regions, day travel is better (good) than night travel.

IV. Fill in the blanks with suitable forms of comparative adjectives. (Jan. 2005)

(a) A wise enemy is better (good) than a foolish friend.
(b) Liberty is more important (important) than food.
(c) Petrol is costlier (costly) than kerosene.
(d) The tiger is more ferocious (ferocious) than other animals.

V. Fill in the blanks with suitable forms of comparative adjectives.

(a) Saudi Arabia was more reluctant (reluctant) to increase oil production than many other countries.
(b) Venezuela is closer (close) to the equator than Bolivia.
(c) Dealers feel that the sale of four-wheelers will definitely be better (good) in the future than it is now.
(d) 24-carat gold is purer (pure)than 22-carat gold.
(e) His clothes have become more wet (wet) than they were before because he walked in the rain.
(f) The dependence on alternative power sources is heavier (heavy) in developing countries than in developed countries.

Interchange of Degrees of Comparison

Rule I

Superlative = S+V+(the + Superlative) +O.W.
Comparative = S+V+ Comparative + than any other + O.W.
Positive = No other + O.W+ V + so / as (Positive) as +S
S = Subject, V = Verb, O.W. = Other Words.

Examples

Superlative = Hyderabad is the largest city in South India.
Comparative = Hyderabad is larger than any other city in South India.
Positive = No other city in South India is as large as Hyderabad.

EXERCISE I

Change the degree of comparison without changing the meaning.

1. This is the best book I have ever read.
2. Shakespeare is the greatest English poet.
3. America is the richest country in the world.
4. Lead is the heaviest metal.
5. Mount Everest is the highest peak of the Himalayas.
6. *Shakuntala* is better than any other drama in Sanskrit.
7. Australia is larger than any other island in the world.
8. *The Arabian Nights* is more popular than any other story-book.
9. Osmium is the heaviest metal on the earth. (Apr.'98)
10. Nuclear power is better than any other source of energy. (M.Q.P. 2002)

Rule II

Superlative = S+V+(one of the + Superlative) +O.W.
Comparative = S+V+ Comparative + than most other (many other) + O.W.
Positive = Very few + O.W.+ V (Plural) + as (Positive) as +S

Examples

Superlative = Taj Mahal is one of the most wonderful buildings in the world.
Comparative = Taj Mahal is more wonderful than most other buildings in the world.
Positive = Very few buildings in the world are as wonderful as Taj Mahal.
Positive = Very few countries are as rich as England.
Superlative = England is one of the richest countries.
Comparative = England is richer than most other countries.

EXERCISE II

Change the degree of comparison without changing the meaning.

1. Mumbai is one of the richest towns in India.
2. Very few islands are as prosperous as Java.
3. Engineering seems to be one of the most popular courses among the students.
4. A computer is one of the most modern inventions. (Nov.'97)
5. Platinum is one of the most precious metals. (M.Q.P. 2002)

Rule III

Note: When there are only two persons, places or things, we can have only two degrees of comparison, Positive and Comparative. We cannot have the Superlative Degree.

Comparative = 'A' +V+ Comparative + than + 'B'
Positive = 'B' +V+ not so (Positive) as + 'A'

Examples

1. (Comp.) = John is taller than Alex.
   (Pos.) = Alex is not so tall as John.
2. (Pos.) = Rani is not so rich as Vijaya.
   (Comp.) = Vijaya is richer than Rani.

EXERCISE III

Change the degree of comparison without changing the meaning.

1. The pen is mightier than the sword.
2. Apples are dearer than mangoes.
3. A wise enemy is better than a foolish friend.
4 Silver is more plentiful than gold.
5 Aluminium is not so strong as steel.
6. Water has a higher boiling point than alcohol. (Ap.'97)
7. Platinum is a more expensive metal than gold. (Nov.'98)
8. A mile is longer than a kilometre. (Oct.2000)
9. Alcohol boils at 78ºC; Water boils at 100ºC. (M.Q.P., 2002)

Rule IV

Positive = 'A' + V + as (Positive) as + 'B'
Comparative = 'B' + V + not + Comparative + than + 'A'

Examples

1. (Pos.) = Tea is as good as coffee.
   (Comp.) = Coffee is not better than tea.
2. (Comp.) = Shanthi is not more beautiful than Rani.
   (Pos.) = Rani is as beautiful as Shanthi.

EXERCISE IV

Change the degree of comparison without changing the meaning.

1. Gopal is as strong as Vijay.
2. Latha is as old as Geetha.
3. Alice is not better than Lucy.
4. Alex is not taller than Smith.

CHAPTER

11 Expanding Nominal Compounds

Compound nouns are nouns, adjectives or verbs made of two or more words or parts of words,written as one or more words,or joined by a hyphen. A few such words commonly encountered in engineering texts are enlisted here.

Examples

1	**Air supply**	supply of air
2.	**Animal behaviour**	the behaviour of an animal
3.	**Aluminium extraction**	the extraction of aluminium
4.	**Arithmetic unit**	a unit in which arithmetic operations are performed
5.	**Ball pen**	a pen that writes with a tiny ball at its point which rolls ink onto the paper
6.	**Battery car**	car which works on battery
7.	**Battery valve**	valve of a battery
8.	**Blast furnace**	furnace of the type which works by blast of preheated air
9.	**Boat house**	boat used as a house
10.	**Boiler feed water**	water for feeding (supplying) the boiler
11.	**Boiler inspection door**	door for the inspection of a boiler
12.	**Butterfly valve**	valve which is in the shape of a butterfly
13.	**Butt weld**	weld of the type called 'butt'
14.	**Cable television**	television signals transmitted through cables
15.	**Calculation speed**	speed with which calculations are done
16.	**Calculator memory**	memory of a calculator
17.	**Car battery**	battery of a car
18.	**Carbon dioxide**	dioxide of carbon
19.	**Cassette tape**	tape of a cassette
20.	**Coal gas**	gas obtained from coal
21.	**Colour television**	television showing pictures in colour
22.	**Communication satellite**	satellite used for communication
23.	**Computer language**	language used for computer operation
24.	**Computer diagnosis**	diagnosis made by a computer
25.	**Computer manual**	manual for operating the computer
26.	**Computer operator**	a person who operates a computer
27.	**Computer technology**	technology used in computers
28.	**Concrete structure**	structure made of concrete

29. **Concrete wall** — wall made of concrete
30. **Condenser extractor pump** — pump for extracting from condenser
31. **Control centre** — centre from where control is exerted
32. **Control tower** — tower that controls
33. **Cooling tower** — tower for the purpose of cooling
34. **Copper wire** — wire made of copper
35. **Cylinder condensation losses** — losses from the cylinder by condensation
36. **Cylinder head** — head of a cylinder
37. **Cylinder head design** — design of the head of a cylinder
38. **Cylinder walls** — walls of the cylinder
39. **Data input** — input of data
40. **Diesel engine** — an engine that runs on diesel
41. **Dish antenna** — antenna in the shape of a dish
42. **Disk drive** — drive of a disk (features of a computer that allows intention of a disk for reading)
43. **Earth oil price increase** — increase in the price of oil obtained from the earth
44. **Energy source** — source from which energy is obtained
45. **Fire fly** — fly that emits flickering light
46. **Fire tube boiler inspection door** — door for the inspection of boiler of fire tube type
47. **Flood damage** — damage caused by flood
48. **Food source** — the source of food
49. **Friction losses** — losses caused by friction
50. **Gas jar** — jar containing gas
51. **Gear mechanism** — mechanism for operating the gear
52. **Generator power output** — output of power from the generator
53. **Gravity feed lubrication system** — system of lubrication by feeding by gravity
54. **Grease gun** — gun used for injecting grease
55. **Heat content** — content of heat
56. **Heat transfer** — transfer of heat
57. **Heat treatment** — treatment with or by heat
58. **Hot water** — water that is hot in condition
59. **Immigration department officer** — officer of the immigration department
60. **Inflation rate** — the rate of inflation
61. **Information centre** — centre for giving information
62. **Jet engine** — an engine propelled by jet
63. **Juice extractor** — extractor used for extracting juice
64. **Key board** — board having keys for operation by finger tips
65. **Laser printer** — printer that uses laser technology
66. **Leaf protein** — protein contained in a leaf
67. **Letter press** — method of printing using raised types
68. **Liquid oxygen** — oxygen obtained in liquid form
69. **Litho plate** — zinc or aluminium plate used in printing
70. **Lock nut** — nut of the kind which locks
71. **Machine language** — language that a machine operates by
72. **Machine testing conditions** — conditions under which a machine is tested
73. **Machine tools** — tools for cutting or shaping materials, driven by a machine

74. **Mackintosh computer a**	a computer of the type known as mackintosh
75. **Mains electricity**	electricity which comes from the mains
76. **Mass production**	production in mass
77. **Measurement procedure**	procedure for measuring something
78. **Media support**	support by media
79. **Mercury thermometer**	thermometer using mercury
80. **Metal tubes**	tubes made of metal
81. **Mild steel**	steel that is mild in nature
82. **Muslin bag**	bag made of muslin
83. **Newsprint**	the paper on which newspapers are printed
84. **Nickel alloy**	alloy containing nickel
85. **Noise pollution**	pollution caused by noise
86. **Pedal power**	power derived from a pedal device
87. **Personal computer**	computer used for personal purposes
88. **Petrol engine**	an engine that runs on petrol
89. **Picture tube**	a tube which gives the picture in a television
90. **Power cable**	cable conducting power
91. **Power output**	output of power
92. **Power source**	source from which/where power is obtained
93. **Power station**	station producing power
94. **Power transmission problems**	problems in the transmission of power
95. **Radio telescope**	telescope using radio waves
96. **Radio waves**	waves of the radio
97. **Research laboratory**	laboratory for research
98. **Resources utilisation**	utilisation of resources
99. **Rice husk**	husk from rice
100. **Road engine**	an engine that runs on the road
101. **Roller mill**	mill for rolling
102. **Rubber roller**	roller made of rubber
103. **Shoe factory site announcement**	announcement of site for shoe factory
104. **Silver extraction**	extraction of silver
105. **Small newspaper**	newspaper serving small circles
106. **Soil laboratory**	laboratory for testing soil
107. **Software packages**	packages of software
108. **Solar cooker**	cooker using solar energy
109. **Space travel**	travel in or to space
110. **Spark plug**	plug that emits spark
111. **Sports column writer**	a person who writes sports column for a newspaper/magazine
112. **Steam chest**	chest containing steam
113. **Steam consumption**	the consumption of steam
114. **Steam engine**	engine that works by steam
115. **Steam jackets**	jackets containing steam
116. **Steam turbine**	turbine driven by steam
117. **Steel bar**	bar made of steel
118. **Steel box**	box made of steel
119. **Steel chain**	chain made of steel

120. **Steel tubes**	tubes made of steel
121. **Stock exchange broker**	a broker for exchange of stock
122. **Stop valve**	valve made to stop the passage
123. **Tamil newspaper reporter**	reporter of a Tamil newspaper
124. **Television mechanic**	mechanic who repairs television
125. **Temperature drop**	drop in temperature
126. **Turret lathe**	lathe having a turret
127. **Underground cable**	a cable that is laid underground to conduct electricity
128. **Waste disposal**	disposal of waste
129. **Water heater**	heater used to heat water
130. **Water power**	power obtained from water
131. **Water supply**	supply of water
132. **Water truck**	truck containing water
133. **Water tube**	tube containing water
134. **Weather report**	a report on the weather
135. **Wet steam**	steam that is wet in condition
136. **Word processor**	processor that records words
137. **Worker honey bee**	the honey bee of the worker category
138. **Workshop machinery**	machinery in or for a/the workshop

Do it Yourself

1. A compound noun such as *power source* can be expanded as a *source of power*. Similarly expand the following compound nouns using suitable prepositions. (M.Q.P.)
   (a) Mains electricity
   (b) A control centre
   (c) The research laboratory
   (d) A water truck

2. Expand the following compound nouns. (Nov./ Dec. 2002)
   (a) Aluminium extraction
   (b) Control tower
   (c) Steel box
   (d) Space travel

3. Expand the following compound nouns. (Apr./ May 2003)
   (a) Silver extraction
   (b) Computer diagnosis
   (c) Resources utilisation
   (d) Information centre

4. Expand the following compound nouns. (Nov./ Dec. 2003)
   (a) Ferrous oxide-coated tape
   (b) Temperature drop
   (c) Power cable
   (d) Heat transfer

5. Expand the following compound nouns. (Apr./ May 2004)
   (a) Lock nut
   (b) Computer design
   (c) Roller mill
   (d) Heat content

6. Expand the following compound nouns. (Jan. 2005)
   (a) power source
   (b) steel chair
   (c) control centre
   (d) calculation speed

7. Air supply (M.Q.P., Apr.'95, Oct.'95, Apr.'96)
8. Aluminium extraction (Nov./ Dec. 2002)
9. Ball pen (Apr.'98)
10. Battery car (Apr.'97, Oct. '97)
11. Battery valve (Apr.'97)
12. Blast furnace (M.Q.P., Apr.'96)
13. Boiler inspection door (Apr.2000, Oct.2001)
14. Butterfly valve (Apr.'96, Oct.'96, Apr.'97)
15. Cable television (Apr.'97, Oct.'98)
16. Car battery (Oct.'97)
17. Colour television (Nov.'96)
18. Communication satellite (Apr.'97)
19. Computer diagnosis (May 2003)
20. Computer language (Oct.2002)
21. Computer operator (Oct.2000)
22. Concrete structure (Apr.'94, Oct.'95, Oct.'96, Apr.'96, Apr.'97)
23. Concrete wall (Apr.'98)
24. Condenser extractor pump (Apr.'94)
25. Control centre (M.Q.P., Jan. 2005)
26. Control tower (Nov./Dec. 2002)
27. Copper wire (Nov.'96, Apr.'97)
28. Cylinder head (Apr.'96)
29. Cylinder head design (M.Q.P., Nov.'94, Apr.2000, Apr.2001)
30. Cylinder walls (Oct.'95)
31. Diesel engine (Apr.'94, Nov.'96, Apr.'97, Oct.'98, Nov.'98)
32. Dish antenna (Nov.'96)
33. Fire tube boiler inspection door (Apr.'96)

34. Flood damage (Apr'.96)
35. Friction losses (Nov.'96, Nov.'99, Oct.2001)
36. Gas jar (Apr.'98, Nov.'98, Apr.'99)
37. Generator power output (Apr.'94, M.Q.P.)
38. Gravity feed lubrication system (M.Q.P.)
39. Grease gun (Apr.'96)
40. Heat content (Oct.'95)
41. Immigration department officer (Apr.2000)
42. Information centre (May 2003)
43. Laser printer (Nov.'98)
44. Lock nut (Apr.'95)
45. Machine testing conditions (Apr.2000, Oct.2001)
46. Machine tools (Oct.2001)
47. Mains electricity (M.Q.P., Apr.'97)
48. Measurement procedure (Oct.2001)
49. Media support (Apr.'97)
50. Mercury thermometer (Nov.'94, Apr.'96, Apr.'97, Apr.'98, Oct'.98)
51. Metal tubes (Apr.'96)
52. Nickel alloy (Oct.'95, Apr.'96, Oct.'96, Apr.'97)
53. Noise pollution (Nov.'98)
54. Petrol engine (Nov.'97, Apr.2001)
55. Power cable (Apr.'95, Nov.'96, Oct.'96, Nov.'97, Apr.'98)
56. Power source (Jan. 2005)
57. Power station (Nov.'99)
58. Power output (Apr.'97)
59. Power transmission problems (Nov.'94, Apr.2000, Apr.2001)
60. Radio telescope (Nov.'98)
61. Radio waves (Apr.'98)
62. Research laboratory (M.Q.P.)
63. Research utilisation (May 2003)
64. Road engine (Oct. 2001)
65. Roller mill (Apr.2001)
66. Shoe factory site announcement (Apr.'96)
67. Soil laboratory (Apr.'96, Apr.'97)
68. Space travel (Nov./Dec.2002)
69. Steel chain (Jan. 2005)
70. Stop valve (Nov.'96)

71. Steam chest (Apr.'96, Apr.2001)
72. Steam consumption (Nov.'96, Oct.'97, Nov.'99)
73. Steam jackets (Nov.'97, Apr.'98)
74. Steam turbine (M.Q.P.)
75. Steel bar (M.Q.P., Apr.'95, Nov.'97, Oct.'98, Apr.'99)
76. Steel box (Nov./Dec.2002)
77. Tamil newspaper reporter (Apr.2000)
78. Television mechanic (Apr.'99)
79. Temperature drop (Nov.'94, Nov.'96, Nov.'98)
80. Turret lathe (Apr.'96, Oct.'96)
81. Waste disposal (Apr.'98)
82. Water supply (M.Q.P.)
83. Water truck (M.Q.P., Apr.'99)
84. Water tube (Apr.'96)
85. Workshop machinery (Apr.'96)

CHAPTER

12 Articles

There are two articles in English:

1. The Indefinite Article '*A*' or '*An*'
2. The Definite Article '*The*'

I. The Indefinite Article ('*A*' or '*An*')

1. '*a*' is used before words beginning with a consonant.
   e.g. a book, a table, a chair, a student

2. '*an*' is used before words beginning with a vowel sound or with a letter '*h*' which is not sounded.
   e.g. (i) *an apple, an egg, an inkstand, an orange, an umbrella*
   (ii) Silent '*h*': '*an*' is used before these words: *heir, heiress, heirloom, honest, honesty, honorarium, honorary, honour, honourable, honoured, hour, hourly.*
   an hour
   an honour
   an heir, etc.
   but a hotel, a house, a hair, a hare, a hostel, a hospital, etc.

3. '*A*' must be used before words which begin with a vowel symbol pronounced with the same sound as the *y* in yet.
   e.g. *Europe, European, uniform, union, unique, Unitarian, united, universal, university, usual, a useful thing, a University, a European.*

4. An M.A., an M.Sc., an M.Com., an M.B.A., an M.C.A., an M.B.B.S., an M.L.A., an N.C.C. Officer but a one-way traffic.

5. '*a*' or '*an*' must be used before a singular noun standing for things that can be counted.
   India is *a* country.
   London is *a* city.
   Rice is *a* cereal.
   A dog is *an* animal.

6. '*a*' or '*an* must be used beofre the names of professions.
   Her father is *a* doctor.
   He is *an* engineer.

7. Words like hero, genius, fool, thief and liar take the indefinite article.
   Beware of that fellow; he is *a* liar.
   My friend is *a* genius.

8. Such + a/an + noun
   or
   Such + a/an + adjective + noun
   Such a thing.
   Such a person.
   Such an honour.
   Such an interesting story.

9. so + adjective + a/an + noun
   so interesting a person.
   so nice an opportunity.

10. '*Few*' and '*Little*' are negative in meaning.
    'A *few*' and 'a *little*' are positive and mean 'some'.
    He has *little* knowledge of this subject.
    I have a *little* money on me.
    He has *few* friends.
    I have a *few* books on this subject.

11. In its original numerical sense of *one*; as,
    Not *a* word was said.
    Twelve inches make *a* foot.
    A bird in the hand is worth two in the bush.

12. *A*, an = one thing or person.
    Lakshmi works in *a* bank.
    Can I ask *a* question?
    I haven't got *a* car.
    There's *a* woman at the bus stop.

13. We use a/an when we say what a thing or a person is for. For example,
    The sun is *a* star.
    Football is *a* game.
    A mouse is *an* animal. It's *a* small animal.
    He is *a* very jolly person.

14. We use a/an for jobs, etc.
    I am *a* dentist.
    He is *a* teacher.
    She is *a* doctor.
    He is *an* engineer.
    Are you *a* student?

II. The Definite Article (The)

'*The*' is used before:-

1. the superlative degree: the best, the tallest, the least.

2. the names of:

(i)	rivers	:	The Ganges
(ii)	seas	:	The Arabian Sea
(iii)	oceans	:	The Pacific Ocean
(iv)	bays	:	The Bay of Bengal
(v)	trains	:	The Rajdhani Express
(vi)	banks	:	The State Bank of India
(vii)	ships	:	*The Queen Elizabeth* is a famous British liner

3. the words King and Queen:
   The King of France
   The Queen of England
   But *the* is not used before the words King and Queen if they are followed by the name of the king or queen.
   King George V (the Fifth)
   Queen Elizabeth II (the Second)

4. Do not put *the* before the names of games
   I play football.
   She loves tennis.
   (Similarly : cricket, rugby, hockey, polo, baseball, chess, etc.)

5. Put *the* before the names of musical instruments.
   She plays *the* guitar.
   He plays *the* violin.

6. Do not put *the* before the names of single mountains or hills.
   Mt. Everest, Nanga Parbat, Nanda Devi
   But *the* must be put before the names of mountain ranges or ranges of hills.
   The Himalayas, the Alps, the Blue Mountains.

7. Use '*the*' with ordinals; as;
   The first, the second, the third, the ninth, etc.
   He was *the* first man to arrive.
   The tenth chapter of the book is very interesting.

8. Do not put *the* before the names of meals if they refer to the meals generally, as a part of the daily routine:
   I have breakfast at eight every morning.
   We have lunch in the afternoon.
   When do you have dinner?
   But *the* must be used when the meal is a particular one, thought of as a social function. The dinner will be held at the Grand Hotel.

9. We say all day, all night, but all the morning, all the afternoon, all the evening, all the week.

10. Use *the* before the names of municipal or government departments and before the names of shops, business houses, industrial concerns, banks, etc. except when they begin with a personal noun.
The Ministry of Education, the Public Library, the Grand Hotel, The State Bank of India but Lloyd's Bank, Smith's Picture Gallery.

11. Do not use *the* before the names of railway stations when they are also place names.
Erode, Chennai, Coimbatore.

12.

Language	*Inhabitants*
English	the English
French	the French

We are learning English.
The English have been a sea-faring people for many centuries.
The French live in France and speak French.
The Italians are a very musical nation.
English is spoken in many countries.
In Austria the people speak German.

13. *The* may be used before a name which ends in Road, but it may also be omitted.
Eg: He lives in Gandhiji Road.
I bought this pen at a shop in the Nethaji Road.

14.

Purpose for which the building exists	*Visit or inspection*
go to school	go to the school
go to college	go to the college
go to church, temple, mosque, etc.	go to the church, temple, mosque, etc.
go to hospital	go to the hospital
go to prison	go to the prison

When *the* is omitted, the reference is to the purpose for which the building exists.
Students go to school to study.
Christians go to church to pray.
With *the* the reference is merely to the building. It is the visit or inspection that is referred to, not the actual purpose.
He went to the school to meet the Headmaster.
He went to the church to look at the buildings.

15. Do not put *the* before the names of substances if they are used in a general sense.
Gold is a precious metal.
Apples are good for health.
We drink water.
But *the* must be used if the reference is to a particular kind or specimen of the substance:
The gold mined here is of poor quality.
The water in that well is very dirty.

16. Do not put *the* before plural nouns when they are used in a general or a universal sense.
    Aeroplanes can fly very fast.
    Apples are grown in many countries.
    But if the reference is to particular one, then *the* must be used.

17. Do not use *the* before the names of countries unless the name suggests that the country is made up of smaller units or constituent parts.
    India, China, Japan, France, Italy
    But The United States of America, The U.K., The U.S.S.R., etc.

18. *The* is used before a singular noun to express what we call '*the generic singular*', i.e. the one thing mentioned is taken to represent all of that kind.
    The tiger and the cat belong to the same family of animals.
    An exception to the above rule is the noun *man* when it is used to denote the human race as a whole.
    Man does not live by bread alone.

19. *The* is used before common nouns which are names of things unique of their kind:
    The sun, the moon, the sky, the earth

20. *The* is used before an adjective when the noun is understood.
    The rich must help the poor.

21. *The* is also used as an adverb with comparatives.
    The more you study, *the* more you learn.
    The earlier you come, *the* better for you.

EXERCISE

Fill in the blanks with suitable articles:-

1. Italy is_____European country.
2. _____ more you study, _____ more you learn.
3. Everyone respects _____ honest person.
4. _____ honour was conferred on him for his services to his country.
5. He had always hoped that his son would go to _____ university.
6. There is _____ garden behind _____ house.
7. _____ postman has just put _____ letter under _____ door.
8. Jack and Jill went up _____ hill to fetch _____ pail of water.
9. There is _____ fly in _____ lemonade.
10. Copper is _____ useful metal.
11. John got _____ best present.
12. _____ usn rises in _____ east.
13. He returned after _____ hour.
14. _____ French defeated _____ Germans,
15. I bought _____ horse, _____ ox, and _____ buffalo.

16. English is _____ language of _____ people of England.
17. _____ lion is _____ king of beasts.
18. Yesterday _____ European called at my office.
19. Iron is _____ useful metal.
20. _____ honorary secretary is one who is not paid for his services.
21. Mumbai is _____ Manchester of India.
22. Please put _____ end to it. What _____ fine ship is there, struggling in _____ cruel waves.
23. _____ apple _____ day keeps _____ doctor away.
24. _____ honest man is _____ noblest work of God.
25. Singapore is _____ island, but Malaysia is _____ Peninsula.
26. He went to _____ church to look at _____ buildings.
27. Where there is _____ will, there is _____ way.
28. All _____ players must come in uniform.
29. The proposal was accepted by _____ unanimous vote.
30. There is _____ hourly bus service on this route.
31. Few pupils gave _____ right answer.
32. January is _____ first month of _____ year.
33. The court imposed _____ heavy penalty.
34. He is _____ honour to his profession.
35. His uncle is _____ M.L.A.
36. _____ wisdom of Solomon is famous.
37. _____ cow is _____ useful animal.
38. I went to _____ hospital to see my friend.
39. I first met him _____ year ago.
40. Benaras is _____ holy city.
41. _____ girls had _____ argument over _____ former boyfriend.

CHAPTER

13 Use of Prepositions

Words like in, on, into, upon, of, to, from, over, under, above, below, by, up, beside, besides, before, after, between, among, etc., are called *prepositions*.These words are usually placed before a noun or pronoun to show the latter's relation to some word in the sentence.

Examples

1. The book is *on* the table.
2. He threw a stone *into* the well.
3. She went to Singapore *by* plane.

I. The Expression of Time

1. For a certain moment or point in time : *at*
   e.g. *at* six o' clock, *at* noon, *at* midnight, *at* sunrise, *at* sunset, *at* dawn, *at* dusk, *at* half-past six.
2. For dates : *on*
   e.g. *on* 5th, *on* 10th, *on* 25th
3. For days : *on*
   e.g. *on* Sunday, *on* Monday
4. For months : *in*
   e.g. *in* January, *in* February
5. For years : *in*
   e.g. *in* 1998, *in* 2001
6. For date and month or month and date : *on*
   e.g. *on* 10th September or *on* September 10th
7. For date, month and year : *on*
   e.g. India became independent *on* 15th August, 1947.
8. For seasons : *in*
   e.g. *in* summer, *in* winter
9. *In* is used before words which denote a period of time
   e.g. *in* the summer, *in* September, *in* the year 1990, *in* the summer holidays, *in* the morning, *in* the afternoon, *in* the evening, *at* night or during the night, but *on* Sunday morning, *on* Friday afternoon, *on* Monday night.
10. For festivals which mark a point of time in the year : *at*
    e.g. *at* Christmas, *at* Easter, *at* Deepavali, *at* Pongal but *on* Christmas Day, *on* Pongal Day.
11. *By* is used to denote the latest time by which something was or is to be done. The implication is that it may be done before then, and not later.
    e.g. You must complete the work *by* Saturday. (on Saturday or before Saturday but not later than Saturday)
12. *In* is used to show the total length of time taken for the completion of some activity or operation.
    I can complete this work *in* two hours.
    The Yercaud Express reaches Chennai *in* seven hours.

13. *Since* and *for*
Since is used for a point in time and *for* is used for a period of time. *Since* means from when and *for* means for how long (= total time).
e.g. I have been working in this College *since* 1990.
I have been working in this College *for* eleven years.

since	*for*
five o' clock	two hours
yesterday	two days
last week	one week
last month	two months
last year	six years
1990	centuries
Christmas	a long time
my birthday	
20th October	

14. *During* is used to express the idea:
(a) That an occurrence continues, or a situation persists throughout the given period.
e.g. We work *during* the day and sleep *during* the night.
(b) That an event took place, or is to take place, within a specified period of time.
e.g. The house was burgled *during* the night.
15. The prepositions *at*, *on* and *in* are not used if the noun giving a time is preceded by an adjective.
I met him last Monday. (not *on* last Monday)
He goes there every day. (not *on* every day)
(Similarly, every morning, every night, every evening, every week, next week, next month, next year, next Wednesday, last week, next Sunday evening).
16. Yesterday, today and tomorrow, besides being nouns, are also used as adverbs and therefore, do not take a preposition.
I shall meet you tomorrow. (not *on* tomorrow)
He has come today. (not *on* today)
He went there yesterday. (not *on* yesterday)

II. The Expression of Place

(A) Place of residence

1. For Countries, towns, etc. : *in*
Many people live *in* cities.
The Chinese live *in* China.
(Similarly, *in* a village, *in* the desert, *in* a country, *in* a city, but *at* the seaside and *on* an island)

2. For villages and smaller towns : *at*
e.g. I met him *at* Bhavani.
But if a person lives there, or because he happens to be there at the moment of speaking : *in* is used
e.g. He lives *in* Bhavani.

3. Houses, Streets, etc.:
(a) For a kind of house or residence, where nothing specific is mentioned, *in* is used.
e.g. She lives *in* a big house.
(Similarly, *in* a modern house, *in* a hotel, *in* a cottage, *in* a flat, *in* a mansion, etc.)

(b) For a particular house or place of residence, *at* is used
e.g. He lives *at* 10 Nethaji Road.
(c) For the names of streets and roads, *in* is used
e.g. He lives *in* Gandhi Street.

(B) Place of work

1. If the place is a building, then *in* is used.
e.g. Her father works *in* a college.
She is working *in* a bank.
(Similarly, *in* an office, *in* a shop, *in* a factory, *in* a restaurant)
2. If it is not a building, *on* is used
e.g. *on* a farm, *on* the railway, *on* an estate, *on* a rubber plantation.
3. If a particular place is indicated, *at* is generally used.
e.g. My uncle works *at* the Town Hall.
(Similarly, *at* the railway station, *at* the City General Hospital, *at* the Public Library)
4. For a particular room or department, *in* is used.
e.g. He is working *in* the English Department.

III.

On business, *on* purpose, *on* holiday, *on* television, *on* the radio, *on* the phone, *on* fire, *on* time (= not late), *on* duty, *on* leave.

IV.

At (the age of) 20, *at* 60 kilometres an hour, *at* 100 degrees, *at* night or during the night, *at* the end of, *at* the moment, *at* the weekend, *at* the bus stop, *at* the door, *at* the traffic lights, *at* the top (of the page), *at* the bottom (of the page), *at* home, *at* work, *at* school, *at* college, *at* university, *at* the station, *at* the airport, *at* Lakshmi's (house), *at* the doctor's, *at* the butcher's, *at* a concert, *at* a football match.

V.

with/without

a man *with* a beard, don't go *without* me.

VI.

Talk *about*, speak *about*, think *about*, hear *about*, know *about*, a book *about*, a question *about*, a programme *about*.

VII.

Accused *of*, afraid *of*, approve *of*, sure *of*, aware *of*, boast *of* or boast *about*, careful *of*, careless *of*, cured *of*, die *of*, full *of*, glad *of*, proud *of*, take care *of*, get rid *of*, dressed *in*, interested *in*, believe *in*.

VIII.

apply *to* a person, apply *for* a post, congratulate someone *on* something.

IX.

1. Made of, made from
   When one substance is changed into another, so that a new substance is produced, *from* is used, but when the original material is not actually changed, but is formed into some object, *of* is used.
   e.g. Her dress was made *of* silk.
   Flour is made *from* wheat.
2. Superior *to*, inferior *to*, senior *to*, junior *to*, prefer one thing *to* another
3. Sit *on* a chair (without arms), sit *in* a chair (with arms)
4. Pray *to* God but worship God
5. Write *in* ink, write *in* pencil, write *with* a pencil, write *with* a pen
6. Translate from one language *into* another
7. A book *by*, a work *by*, a painting *by*
8. Useful *to* a person, useful *for* a purpose

X.

1. Pleased *with*, happy *with*, agree *with*, angry *with*, satisfied *with*, contented *with*
   Agree *with* a person
   Agree *to* a proposal
   Angry *with* a person
   Angry *at* something
2. Married *to*, similar *to*, different *from*
3. *Beside* (by the side of, next to, near), *besides* (in addition to, furthermore)
4. *On* the floor (on the ground floor, on the first floor)
5. Good *at*, bad *at*, weak *in*
6. *Between* ... and
7. *By* bus, *by* car, *by* auto, *by* taxi, *by* lorry, *by* train, *by* ship, *by* plane, *by* sea, *by* air
   e.g. He went to Salem *by* car.
   He went to Salem *in* his car.

XI.

Insist *on*, rely *on*, remind someone *of*, succeed *in*, sympathise *with*, abstain *from*, attend *to*, care *for*, look *at*, look *after*, look *into*, hope *for*, go *to* a place, come *from* a place, *between* (for two), *among* (for more than two).

Additional Examples

I. Fill in the blanks with suitable prepositions. (Nov./Dec. 2002)

Artificial intelligence (AI) is the science <u>of</u> developing computers that can learn and follow instructions <u>with</u> great accuracy and speed. An example <u>of</u> AI is the use <u>of</u> expert systems.

II. Fill in the blanks with suitable prepositions. (Apr. / May 2003)

The gobar gas plant is a simple apparatus used <u>for</u> turning animal wastes <u>into</u> bio-gas plus nitrogen fertiliser. 'Gobar' comes <u>from</u> the Hindi word <u>for</u> cow. Cattle-dung forms the primary source <u>of</u> fuel <u>for</u> the rural population <u>in</u> India. Other supplementary materials like organic wastes can be used, wherever the availability <u>of</u> cattle-dung is found to be inadequate.

III. Fill in the blanks in the following sentences with suitable prepositions. (Nov. / Dec. 2003)

(a) The ore is then transported to mills.
(b) The machine is very heavy in spite of its small size.
(c) Oil is found underground trapped in the layers of rock.
(d) By operating the pump rhythmically water is pumped.

IV. Fill in the blanks in the following sentences with suitable prepositions. (Apr. / May 2004)

(a) One of India's priorities is growing more food.
(b) There are countless opportunities for qualified computer personnel.
(c) Gold is a rare metal with a beautiful yellow colour.
(d) 10 degrees is the limit upto which the nozzle controls the steam flow.

V. Fill in the blanks in the following sentences with suitable prepositions. (Jan. 2005)

(a) The apartment consists of three bedrooms, a kitchen and two bathrooms.
(b) The accident took place because of my fault, so I had to pay for the damage.
(c) It is terrible that some people are dying of hunger while others eat too much.
(d) You know that you can depend on me whenever you need help.

VI. Fill in the blanks in the following sentences with suitable prepositions. (Apr./May 2003)

The present day computer viruses are different from their ancestors. Earlier, these programmes were spread by users who shared programmes and data via floppies. These viruses either hid in the boot sector of floppy disks or in programme files, infecting other files when programmes were launched. But today, they spread at a dizzying speed by way of file transfers and e-mail through the Internet.

EXERCISE

I. Fill in the blanks with suitable prepositions.

1. My birthday is _____ 23rd September.
2. We are having a party _____ New Year's Day.
3. _____ which year was she born?
4. They ceased work _____ sunset.
5. The exhibition is to be officially opened _____ Monday next_____ 5 p.m.
6. The train leaves _____ 6.30, and arrives in Chennai _____ 11.30.
7. Please let me have your answer _____ the end of the month at the latest.
8. The Second World War ended _____ 1945.
9. He has been working in this office _____ 1990.
10. We have been waiting here _____ three hours.
11. She came home _____ Christmas.
12. We go to Ooty _____ summer.
13. Shakespeare lived _____ the reigns of Elizabeth I and James I.
14. He was born _____ 1564, and died _____ 1616.

II. Fill in the blanks with suitable prepositions.

1. She lives _____ Delhi.
2. They live _____ Erode _____ India.
3. My friend lives _____ a large house.
4. Would you rather live _____ the town, or _____ the country?
5. The Prime Minister lives _____ 10 Downing Street.
6. Mr.Rajan and his wife stay _____ the seaside for a month each June.
7. He prefers to work _____ a farm.
8. Mr. John is working as an officer _____ the State Bank of India.
9. Would you prefer to work _____ a factory, or _____ a farm?
10. People who live _____ glass houses should not throw stones.

III. Fill in the blanks with suitable prepositions.

1. They're _____ holiday.
2. We watched the news _____ television.
3. We listened _____ the news _____ the radio.
4. Lakshmi got married _____ the age _____ 21.
5. The train was travelling _____ 100 kilometres an hour.
6. Water boils _____ 100 degrees Celsius.
7. Please don't be late. Try to be here _____ time.
8. The plane is flying _____ 700 miles an hour.
9. These trains are very fast. They can travel _____ very high speeds.
10. I am very busy _____ the moment.

IV. Fill in the blanks with suitable prepositions.

1. What would you like to have _____ your meal?
2. They are talking _____ the weather.
3. I don't know much _____ him.
4. She found a purse full _____ money.
5. Are you interested _____ modern art?
6. We were glad to get rid _____ such an untrustworthy person.
7. She is proud _____ her new car.
8. A modest man does not boast _____ his achievements.
9. The prisoner was accused _____ murder.
10. All the players must come _____ uniform.
11. The Yercaud Express goes _____ Erode _____ Chennai.
12. He applied _____ the manager _____ the post _____ a clerk.
13. I complimented her _____ her success _____ the examination.
14. Quotations have been called _____ by the new manager. (Oct. 2001)
15. The painters prevent the metal _____ corroding. (Oct. 2001)

V. Fill in the blanks with suitable prepositions.

1. This tool is quite useless _____ me.
2. This tool is quite useful _____ my purpose.
3. *Romeo and Juliet* was written _____ Shakespeare.
4. He wrote the answer _____ ink.
5. I am senior _____ you.
6. You are junior _____ me.
7. He translated the passage _____ English _____ Tamil.
8. I prefer tea _____ coffee.

VI. Fill in the blanks with suitable prepositions.

1. Erode is _____ Salem _____ Coimbatore.
2. My teacher is pleased _____ my work.
3. I fully agree _____ you.
4. I can't agree _____ your proposal.
5. She is angry _____ me.
6. She is angry _____ your misconduct.
7. My sister is married _____ a doctor.
8. This book is similar _____ that.
9. He is quite different _____ his friend.
10. Come and sit _____ me.
11. _____ a Ford he has a Fiat car.
12. She is good _____ English.
13. Her sister is weak _____ health.
14. The laboratory is _____ the ground floor.

VII. Fill in the blanks with suitable prepositions.

1. He insisted _____ my doing it.
2. I reminded him _____ his promise.
3. She succeeded _____ passing the examination.
4. We should sympathise _____ the poor and the suffering.
5. Students abstained _____ classes.
6. He divided the property _____ his two sons.
7. She divided her property _____ her five children.
8. He has no one to look _____ him in his old age.

VIII. Fill in the blanks with suitable prepositions.

1. The pulley is mounted _____ the shaft. (Apr.'94)
2. The fuel travels _____ the conveyor chain. (Apr. 2000)
3. Most engines in industrial use are rated to run _____ a constant speed. (Apr. 2000)
4. He is known for his commitment _____ teaching. (Apr. 2000)
5. Steel undergoes structural changes when it is heated _____ its critical temperature. (Apr. 2000)
6. The noise is preventing me _____ studying. (Oct.2000)
7. He will return _____ a fortnight. (Apr. 2000)
8. This substance is soluble _____ water.
9. The road is accessible _____ traffic.
10. This machine is identical _____ the other one.
11. These figures are not consistent _____ the results obtained in previous experiments.
12. The motor is designed to run _____ constant speed, irrespective _____ the load.
13. The metallic sleeves are liable _____ corrosion if they are made _____ cast-iron.
14. This type _____ soil is especially susceptible _____ frost damage.
15. Large frictional losses are incompatible _____ high engine efficiency.
16. The volume _____ the gas will then be directly proportional _____ its absolute temperature.
17. Each operator is responsible _____ the proper maintenance _____ his machine.
18. Vibration _____ the work-piece is detrimental _____ the cutting tool.
19. The boiler drum is rather small relative _____ the weight _____ steam required.
20. The defects inherent _____ this type _____ machine make it _____ limited usefulness.

(Sentences 8 to 20 are taken from A.J. Herbert's *The Structure of Technical English*, pages 172-173).

IX. Fill in the blanks with suitable propositions.

1. The message on the phone can be forgotten or lost if it is not put _____ in writing.
2. On the telephone you tend to speak casually and you break _____ mid-sentence.
3. To me the time saved seems to make _____ for all the disadvantages you're talking about.
4. He can ask _____ Rajendran, that's my name.
5. This movement has its origins _____ national politics.
6. The first is a 15-minute episode of a continuing dramatic story dealing _____ the adventures of a group of young people.

X. Fill in the blanks with suitable prepositions.

1. She drove the car _____ a speed of 80 miles an hour.
2. He was not prepared to act _____ his principles.
3. The factory has been closed _____ two years.
4. The road has a gradient of one _____ six.
5. _____ tomorrow evening, the report will be ready.
6. Yesterday the chairperson left _____ New Delhi.

7. The ball missed the goal _____ inches.
8. _____ the last earthquake, the town has been facing many difficulties.
9. The value was calculated _____ an accuracy of three decimal places.
10. As the spaceship sailed _____ Jupiter, it sent photographs of the planet to the earth station.
11. The room measures 60 feet _____ 40 feet.
12. This motor consumes electricity _____ two kilowatts per hour.

XI. Fill in the blanks with suitable prepositions.

1. Every day hundreds _____ people visit Teen Murti House _____ New Delhi, Prime Minister Jawaharlal Nehru's official residence, to pay homage _____ the great leader. Converted _____ a museum _____ his death _____ 1964, it is replete _____ historical objects, photographs, rare documents and personal effects that afford a glimpse _____ the multifaceted man. (May 2002)
2. Oil, the major source _____ energy _____ the world today, has had a dramatic effect _____ the world's economy. Until quite recently, the demand _____ oil seemed unlimited.
3. I was born and brought up _____ a remote village located _____ the foothills _____ the Vindhya range _____ Madhya Pradesh.
4. Srinivasa Ramanujan, born a hundred years _____ was a great mathematical genius. To be exact, he was born _____ 1987. He accepted a clerical position _____ the Madras Port Trust Office. _____ 16 June 1913, he wrote G.H. Hardy of Cambridge University a letter that was to change his life.
5. At Hardy's invitation, Ramanujan arrived _____ England _____ 1914. At Trinity College he worked _____ hours and hours _____ mathematics, often neglecting his food and sleep.
6. Unfortunately he fell ill and returned _____ India _____ 1919. He died a year later, _____ the age _____ 32.
7. Two _____ the world's most powerful wind turbines are to be raised off the UK coast ___ the consortium Blyth Offshore Wind Limited. Each turbine is capable _____ generating two megawatts _____ electricity and _____ total will provide enough electricity _____ power 3,000 households annually.
8. A team _____ European researchers and small businesses, coordinated _____ the University _____ Plymouth have invented a new device _____ harnessing the power _____ the waves.
9. The possible development _____ computers _____ future might be _____ these lines. (Oct.'95, Oct.'96)
10. Appropriate technology is a technology that is developed _____ cater _____ the basic needs _____ economically poor people. (Apr. '96)
11. The process _____ smelting consists _____ heating the ore _____ a blast furnace. (Apr.'97)
12. Ramanujan was born _____ 1887 _____ the town _____ Erode _____ southern India and grew up _____ the nearby town _____ Kumbakonam where his father was an accountant _____ a cloth merchant. (Apr.'96)
13. The ball missed the goal _____ inches (Nov.'96)
14. (a) The teacher pointed _____ the mistakes.
    (b) He prefers volleyball _____ football. (Nov.'96)

XII. Fill in the blanks with suitable prepositions.

1. Many people _____ India expend their muscle power every day _____ provide themselves _____ the basic necessities _____ life. An example is the widespread use _____ the bicycle. It should be noted that the power produced _____ a human being cannot match that produced _____ the internal combustion engine and electric motor. But due _____ the shortage _____ fuels and undependable electric supply, an innovative use _____ human energy may have to be considered seriously.

2. _____ pump water, all that one has _____ do is _____ sit _____ the bicycle seat and pedal. The drive is transmitted _____ the front sprocket _____ the rear wheel which now acts as a flywheel and transmits the power _____ the second chain _____ the pump.

3. Lunawa is a coastal village _____ southern Sri Lanka where children can be seen eating fortified Kola Kenda regularly. This local porridge traditionally made _____ coconut, rice and juice _____ fresh green leaves, began to be re-popularised _____ the rural development group Sarvodaya _____ its nursery schools following the spread _____ malnutrition _____ the 1973 cyclone.

4. _____ make the leaf protein, fresh green leaves are fed _____ the machine _____ a feed hopper, and are gradually moved along _____ a helical screw whilst _____ the same time being pulped and then pressed _____ separate out the inedible fibre _____ the juice.

5. _____ those _____ us who harbour the rankling fear that the printed word is _____ its way out and that the electronic age is about to take over the world _____ books, a visit _____ the children's section _____ a public library is a great source _____ satisfaction.

6. Although there is evidence to show that some form _____ printing was known _____ ancient times, it was printing _____ movable type that constituted a turning point _____ the development _____ printing. The invention _____ printing as we know it today is ascribed _____ Johann Gutenberg _____ Strasbourg.

7. Typefoundry too developed side _____ side. The type was made _____ pouring molten type metal, generally an alloy _____ tin and lead, _____ a mould. Typesetting was done _____ hand and the types were wedged together _____ a tray. Ink was spread _____ the type and then the paper was pressed _____ the types. This continued to be the basic method _____ printing _____ the present day.

8. _____ the time he interested himself _____ the printing business, the letterpress was the staple means _____ typesetting. Ghosh's Eastend Press catered, _____ choice, exclusively _____ printing _____ English. _____ Ghosh, printing was as much a mission as a profession. He would insist _____ advancing the cause _____ quality and quality alone. He revolutionised letterpress printing _____ the country.

9. Appropriate technology is technology that is developed to cater _____ the basic needs _____ people with low spending power. It is not low or primitive technology. Also, it is not concerned _____ only small-scale technology. Appropriate technology lies somewhere _____ traditional and modern technology. It is particularly easy to operate and can be maintained even _____ less skilled persons. The special feature _____ this technology is that it can be applied _____ a variety _____ rural needs.

10. We think _____ communication generally in terms _____ words and sentences, but this is not the only way _____ which human beings communicate. There are other ways of communication which do not use language. Some _____ these replace speech, and some supplement speech. The most obvious _____ the latter are gestures _____ various kinds, which we make while speaking. These gestures are so naturally a concomitant _____ speaking that we make use _____ them even when we are speaking _____ the telephone. The word 'gesture' refers _____ some significant movement _____ the arms, hands or head. Other physiological means — supplementing speech are the use _____ facial expressions and position _____ the body. Gesture is, _____ course, a feature of face-to-face interaction and is therefore associated _____ spoken words. It has its analogue, however _____ written communication. Generally _____ written materials _____ a technical kind, communicative devices like graphs, flowcharts and diagrams take the place _____ gestures.

11. (a) The message on the phone can be forgotten or lost if it is not put _____ in writing.
    (b) On the telephone you tend to speak casually and you break _____ mid-sentence.
    (c) To me the time saved seems to make _____for all the disadvantages you're talking about.
    (d) He can ask _____ Rajendran that's my name.
    (e) This movement has its origins _____ nations politics.
    (f) The first is a 15-minute episode of a continuing dramatic story dealing _____ the adventures of a group of young people.

12. Industrialisation and urbanisation have inevitably put a damper _____ traditional and folk forms of art worldwide, but they are certainly not on the verge of extinction. Indeed _____ several countries, including the US and UK these forms of art have a significant presence. The story is no different in India, either. Despite the growing penetration _____ cinema and television and the general indifference _____ ofthe elite sections of society _____ the folk medium, a substantial number _____ India's folk art forms have managed not only to survive, but also to flourish _____ continued community support. Proof _____ this was available when over 250 folk artists _____ different parts of the country performed 23 art forms, each distinct _____ the other _____ Chennai _____ July. The performances were part of a fortnight-long seminar cum-cultural festival sponsored _____ the Indira Gandhi Rashtriya Manav Sangrahalaya (IGRMS) an organization established _____ the Union Ministry of Human Resources Development. The IGRMS is engaged _____ identifying areas in the socio-cultural lives _____ people in different states _____ documentation and conservation in 'live' forms.

13. Nuclear power is a genuine economic option _____ power supply _____ locations far removed _____ coal reserves, especially if hydel sources are not available _____ those areas.

14. The progress _____ the filed _____ chemistry has resulted _____ the development _____ all kinds _____ industries. The applications _____ chemistry _____ the fields _____ medical and biological are significant. (Apr./May 2004)

15. Appropriate technology is a technology that is developed to cater _____ the basic needs _____ economically poor people. Also, it is not concerned _____only the small scale technology. Appropriate technology lies somewhere _____ a traditional and modern technology. It is particularly easy to operate and can be maintained _____less skilled persons. A special feature _____this technology is that it can be applied _____a variety _____ rurual needs. (Nov./Dec.2004)

CHAPTER

14 Phrasal Verbs

A *Phrasal verb* is a simple verb combined with an adverb or a preposition, or sometimes both, to make a new verb with a meaning that is different from that of the simple verb.

e.g. *go in for*, *win over*, and *blow up*.

Examples

1. *abide by* (to accept or obey an agreement, rule, or decision)
   If you join a club, you have to *abide by* its rules.
2. *abound in / with* (to contain a lot of something)
   This river *abounds in* fish.
3. *accede to* (to agree to something that someone has asked for)
   He did not *accede to* my request.
4. *account for* (to explain the reason for something or the cause of something)
   Can you *account for* your absence last Friday?
5. *add up to* (to become a particular amount)
   The numbers *add up to* exactly 100.
6. *adhere to* (to obey a rule or principle)
   Companies failing to strictly *adhere to* safety guidelines are penalised.
7. *aim at* (to try to achieve something)
   We must *aim at* increasing exports.
8. You must *allow for* some variations in the theme (to provide something for a purpose or in estimating something)
   You must *allow* three metres *for* a long-sleeved dress.
9. *allude to* (to mention somebody, something briefly or indirectly)
   You *alluded* in your speech *to* certain developments - what exactly did you mean? You *allowed to* certain developments in your….
10. *arrive at* (to reach a place, especially at the end of a journey)
    We *arrived at* the station three minutes late.
11. *aspire to* (to have a strong desire or ambition to gain or achieve something)
    The film *aspires to* be a serious historical study.
12. *attend to* (to concentrate on somebody/ something)
    You must *attend to* your work and stop talking.
13. *back out* (to withdraw from an agreement, a promise, etc.)
    It's too late to *back out* of the deal now.
14. *back up* (to support)
    He was *backed up* by his friends.
15. *bank on* (to rely on)
    I'm *banking on* your help.
16. *bear out* (to show that a story, etc., is true)
    The other witnesses will *bear out* what I say.

17. *believe in* (to feel sure of the existence of something)
    Do you *believe in* ghosts?
18. *belong to* (to be the property of somebody)
    The earth does not *belong to* man; man *belongs to* the earth.
19. *blow over* (to go away without having a serious effect)
    The storm *blew over* in the night.
20. *blow up* (to explode)
    The bomb *blew up.*
21. *break off* (to stop speaking)
    He *broke off* in the middle of a sentence.
22. *break down* (to stop working because of a mechanical, electrical fault)
    Our car *broke down* on the way.
23. *break out* (to start suddenly)
    Fire *broke out* during the night.
24. *break up* (of members of a group to go away in different directions)
    The meeting *broke up* at 11 O' clock.
25. *build up* (become greater, larger in number or more intense)
    Traffic is *building up* on roads into the city.
26. *burst into* (to start producing something suddenly and with great force)
    The aircraft crashed and *burst into* flames.
27. *call off* (to cancel or abandon something)
    The strike has been *called off.*
28. *call on / upon* (formally to invite or request somebody to speak)
    I now *call upon* the chairman to address the meeting.
29. *call for* (request or demand for something)
    The President made a *call for* national unity.
30. *carry on* (to continue)
    Carry on with your work.
31. *carry out* (to fulfil something)
    We will *carry out* the necessary work.
32. *catch on* (to become popular or fashionable)
    Mini-skirts first *caught on* in the 1960s.
33. *come about* (to happen)
    Can you tell me how the accident *came about?*
34. *come across* (to meet or find somebody / something by chance)
    She *came across* some old photographs in a drawer.
35. *consist of* (to be composed of)
    The committee *consists of* ten members.
36. *cut down* (to reduce the amount or quantity of something)
    The doctor told him to *cut down* on his drinking.
37. *deal in* (to sell something)
    We *deal in* computer software.
38. *deal with* (to have social, business, etc., relations with somebody)
    He has to *deal with* all kinds of people.
39. *drop out* (to leave school, university, etc., without finishing one's courses)
    She started doing an engineering degree but *dropped out* after only a year.

40. *end in* (to have something as a result or conclusion)
    Their long struggle *ended in* failure.
41. *end up* (to reach or come to a certain place)
    If you go on like this you'll *end up* in prison.
42. *fall out* (to become loose and drop)
    His hair is *falling out.*
43. *fall back on* (to go to somebody for support or have something to use when in difficulty)
    We can always *fall back on* candles if the electricity fails.
44. *fall through* (to fail to be completed)
    Their plans *fell through* because of a sudden death in the family.
45. *fill in* (to add what is necessary to make something complete)
    He *filled in* the application form.
46. *fill up* (to become or make something completely full)
    He *filled up* the tank with petrol.
47. *fit in* (to be in harmony with somebody / something)
    Do these plans *fit in* with your arrangements?
48. *get away* (to escape from somebody or a place)
    Two of the prisoners *got away* from their captors.
49. *get rid of* (to be / become free of somebody / something that causes one annoyance or trouble)
    He *got rid of* his bad habits.
50. *get through* (to be successful in or pass an examination, a test, etc.)
    Raj failed but his sister *got through*.
51. *give up* (to abandon an attempt to do something)
    They *gave up* without a fight.
52. *go through* (to look up or to examine something carefully, especially in order to find something)
    I always start the day by *going through* the mail.
53. *insist on / upon* (to demand something forcefully)
    I *insist on* your taking immediate action to put this right.
54. *look out for* (to be aware of the possibility of somebody coming or something happening and try to avoid them / it).
    You should *look out for* pick pockets.
55. *look through* (to examine or read something especially quickly)
    She *looked through* her notes before the examination.
56. *make out* (to manage, to survive, to fare)
    How did he *make out* while his wife was away?
57. *make up* (to form or constitute something)
    Animal bodies are *made up* of cells.
58. *put on* (to dress oneself in something)
    Which dress shall I *put on* for the party?
59. *put out* (to stop something burning, to extinguish)
    Foremen soon *put out* the fire.
60. *put up with* (to tolerate or bear somebody / something)
    I don't know how she *puts up with* his drinking.
61. *rely on / upon* (to need or be dependent on somebody / something)
    Nowadays we increasingly *rely on* computers to regulate the flow of traffic in the town.

62. *see through* (to realise the truth about somebody / something so that one is not deceived)
    We *saw through* him from the start.
63. *set out* (to leave a place and begin a journey)
    We *set out* at dawn.
64. *set up* (to place or build something)
    They *set up* a monument in memory of their departed hero.
65. *settle down* (to become or make somebody calm, less lively, excited, etc.)
    Settle down and be quiet!
66. *turn up* (to arrive; to make one's appearance)
    We arranged to meet at the cinema at 1.30, but he never *turned up.*

CHAPTER

15 Commonly Mispronounced and Misspelt Words

WORDS COMMONLY MISPRONOUNCED

1. Pronunciation
2. Calculator
3. Absent
4. Robot
5. Reserve
6. Reservation
7. Food
8. Buffet
9. Eyes
10. Loose
11. Lose
12. Heart
13. Park
14. Arm
15. Hard
16. Clerk
17. Caste
18. Graph
19. Grant
20. Grand
21. Bomb
22. Comb
23. Tomp
24. Formulae
25. Syllabi
26. Curriculum Vitae
27. Bio-Data
28. Remote
29. Debt
30. Women
31. Vice
32. Wise
33. Fowl
34. Nurse
35. Bird
36. Heard
37. Hurt
38. Dirt
39. Girl
40. First
41. Wednesday
42. Saturday
43. Temporary
44. Beer
45. Deer
46. Gear
47. Heir
48. Tour
49. Silly
50. Judge
51. Bridge
52. Budget
53. Gesture
54. Thumb
55. Among
56. Balm
57. Radar
58. Kicked
59. Picked
60. Asked
61. Searched
62. Brushed
63. Kissed
64. Privilege
65. Nobel
66. Hotel
67. Receipt
68. Price
69. Prize
70. Praise

71. Queue
73. Bouquet
75. Written
77. Sow (Female pig)
79. Religious
81. Simultaneous
83. Forget
85. Were
87. Stapler
89. Karate
91. Honorarium
93. Tier
95. Et cet era (etc.)
97. Canvas
99. Leisure
101. Treasure
103. Minute (very small)
105. Mechanical
107. Inaugurate
109. Professor
111. Honorary
113. Machine
115. Chef
117. Chicago
119. All, Ball, Fall, Thought, Ought
72. Engineer
74. Refreshments
76. Return
78. religion
80. Trophy
82. Compéré
84. Forgive
86. Colleague
88. Courier
90. Bonafide
92. Liquefied
94. Ski
96. Penalty
98. Canvass
100. Pleasure
102. Tour
104. Bury
106. Accept, Expect
108. Bath, Bathe
110. Enter, Entrance
112. Lieutenant
114. Decision
116. Chauffeur
118. Artist, Artiste
120. Zoo, Zink, Zero

WORDS COMMONLY MISSPELT

Tick the correct spelling:

Examples

No.	A	B
1.	tiffen	tiffin
2.	acommodate	accommodate
3.	grammar	grammer
4.	seiling	ceiling
5.	liquefied	liquified
6.	twelfth	twelveth
7.	seperate	separate
8.	commitee	committee
9.	chalenge	challenge
10.	similer	similar
11.	entrerance	entrance
12.	amatuer	amateur
13.	prevelage	privilege
14.	attendence	attendance
15.	advertisment	advertisement

16.	embarass	embarrass
17.	begining	beginning
18.	calendar	calender
19.	depandent	dependent
20.	omited	omitted
21.	paralell	parallel
22.	fasinate	fascinate
23.	temporary	tempervary
24.	questionairre	questionnaire
25.	correspondance	correspondence
26.	conveniance	convenience
27.	arithmatic	arithmetic
28.	superintendant	superintendent
29.	pronounciation	pronunciation
30.	definately	definitely
31.	guidance	guidence
32.	restaurent	restaurant
33.	accessable	accessible
34.	assistent	assistant
35.	ocurrance	occurrence
36.	oppurtunity	opportunity
37.	irresistible	irresistable
38.	parliment	parliament
39.	permanant	permanent
40.	consentious	conscientious
41.	greatful	grateful
42.	superseed	supersede
43.	descendant	descendent
44.	benefited	benefitted
45.	rythem	rhythm
46.	recieve	receive
47.	dissapoint	disappoint
48.	maintainance	maintenance
49.	mischevious	mischievous
50.	appearence	appearance
51.	agrrevate	aggrevate
52.	dissappear	disappear
53.	occasion	ocassion
54.	connossieur	connoisseur
55	asassin	assassin
56.	hypocrisy	hypocracy
57.	penetentiery	penitentiary
58.	ecstasy	ecstacy
59.	rhinocerous	rhinoceros
60.	effervescent	effervesent
61.	proceedure	procedure

62.	misspelled	mispelled
63.	auxiliary	auxilliary
64.	miscelaneous	miscellaneous
65.	villian	villain
66.	shedule	schedule
67.	transferred	transfered
68.	matress	mattress
69.	comparitive	comparative
70.	recomend	recommend
71.	noticeable	noticable
72.	beleive	believe
73.	prejudise	prejudice
74.	perseverence	perseverance
75.	imaginary	imagenary
76.	exagerrate	exaggerate
77.	irresistable	irresistible
78.	foriegn	foreign
79.	millionnaire	millionaire
80.	innoculate	inoculate
81.	beureau	bureau
82.	newsance	nuisance
83.	encycleopedia	encyclopaedia
84.	programe	programme
85.	ettiqette	etiquette
86.	champaine	champagne
87.	seive	sieve
88.	millenium	millennium
89.	preceed	precede
90.	niece	neice
91.	marriage	marraige
92.	canceled	cancelled
93.	grievence	grievance
94.	weird	wierd
95.	criticize	critisize
96.	analyze	analize
97.	aquaintence	acquaintance
98.	experrience	experience
99.	convenience	conveniance
100.	exaggarate	exaggerate
101.	proffesor	professor
102.	liesure	leisure
103.	possession	posession
104.	gaurantee	guarantee
105.	tarrif	tariff
106.	tommorow	tomorrow
107.	curriculam	curriculum
108.	remittance	remmitance

Answers

1.	tiffin	2.	Accommodate	3.	grammar	4.	ceiling
5.	liquefied	6.	twelfth	7.	separate	8.	committee
9.	challenge	10.	similar	11.	entrance	12.	amateur
13.	privilege	14.	attendance	15.	advertisement	16.	embarrass
17.	beginning	18.	calendar	19.	dependent	20.	omitted
21.	parallel	22.	fascinate	23.	temporary	24.	questionnaire
25.	correspondence	26.	convenience	27.	arithmetic	28.	superintendent
29.	pronunciation	30.	definitely	31.	guidance	32.	restaurant
33.	accessible	34.	assistant	35.	occurrence	36.	opportunity
37.	irresistible	38.	parliament	39.	permanent	40.	conscientious
41.	grateful	42.	supersede	43.	descendant	44.	benefited
45.	rhythm	46.	receive	47.	disappoint	48.	maintenance
49.	mischievous	50.	appearance	51.	aggrevate	52.	disappear
53.	occasion	54.	connoisseur	55.	assassin	56.	hypocrisy
57.	penitentiary	58.	ecstasy	59.	rhinoceros	60.	effervescent
61.	procedure	62.	misspelled	63.	auxiliary	64.	miscellaneous
65.	villain	66.	schedule	67.	transferred	68.	mattress
69.	comparative	70.	recommend	71.	noticeable	72.	believe
73.	prejudice	74.	perseverance	75.	imaginary	76.	exaggerate
77.	irresistible	78.	foreign	79.	millionaire	80.	inoculate
81.	bureau	82.	nuisance	83.	encyclopaedia	84.	programme
85.	etiquette	86.	champagne	87.	sieve	88.	millennium
89.	precede	90.	niece	91.	marriage	92.	cancelled
93.	grievance	94.	weird	95.	criticize	96.	analyze
97.	acquaintance	98.	experience	99.	convenience	100.	exaggerate
101.	professor	102.	leisure	103.	possession	104.	guarantee
105.	tariff	106.	tomorrow	107.	curriculum	108.	remittance

CHAPTER

16 British and American Vocabulary

There is a disparity in the meaning conveyed by certain words, between the British and American forms of English. Also there is a difference in the way certain words are spelt in the two forms.

Examples

1. **Give the American English equivalents of the following British English words.**

   (a) Lift (b) Chemist (Nov./Dec. 2003)

   Answer

   Lift = Elevator

   Chemist = Druggist

2. **Give the American spellings for the following British equivalents.** (Apr./May 2004)

	British English	**American English**
(a)	Programme	
(b)	Theatre	
(c)	Industrialisation	
(d)	Colour	

Answer

	British English	**American English**
(a)	Programme	program
(b)	Theatre	theater
(c)	Industrialisation	industrialization
(d)	Colour	color

BASIC DIFFERENCES

	British English	**American English**
I.	**- our**	**- or**
	Favour	favor
	Odour	odor
	Honour	honor
	Endeavour	endeavor
	Favourable	favorable

	Ardour	ardor
	Armour	armor
	Clamour	clamor
	Colour	color
	Harbour	harbor
	Humour	humor
	Labour	labor
	Tumour	tumor
	Valour	valor
	Vapour	vapor
	Vigour	vigor
	Honourable	honorable
	Parlour	parlor
	Rigour	rigor
II.	**- re**	**- er**
	Calibre	caliber
	Centre	center
	Metre	meter
	Centimetre	centimeter
	Kilometre	kilometer
	Millimetre	millimeter
	Fibre	fiber
	Theatre	theater
	Lustre	luster
III.	**- ll**	**- l**
	Woollen	woolen
	Callipers	calipers
	Leveller	leveler
	Marvellous	marvelous
	Medallist	medalist
	Reveller	reveler
	Chilli	chili
	Councillor	councilor
	Counselling	counseling
IV.	**- l**	**- ll**
	Skilful	skillful
	Wilful	willful
	Enrol	enroll
	Fulfil	fulfill
	Instil	instill

V.	**- c**	**- s**
	Licence	license
	Offence	offense
	Pretence	pretense
VI.	**-c**	**- k**
	Sceptical	Skeptical
VII.	**-gue**	**- g**
	Analogue	analog
	Catalogue	catalog
VIII.	**- mme**	**- m**
	Programme	program
IX.	**-s**	**- z**
	Analyse	analyze
	Paralyse	paralyze
X.	**- tt**	**- t**
	Carburettor	carburetor
XI.	**- nn**	**- n**
	Channel	chanel

Given below is a list of British English words with their American equivalent

Adviser	advisor
Aerial	antenna
Alsatian	German shepherd
Autumn	fall
About	around
About-turn	about-face
Aeroplane	airplane
Aesthetic	esthetic
Afterwards	afterward
Ageing	aging
Allround	all-around
Alternative	alternate
Amber	yellow
Amoeba	ameba
Anywhere	everyplace
Annexe	annex
Anti-clockwise	counter clockwise
Axe	ax
BA	AB
Biscuit	cookie
Board and lodging	room and board
Cheque	check

Cutting	clipping
CV	résumé
Cutlery	silverware
Change	shift
Cosy	cozy
Chemist	druggist, pharmacist
Cipher	zero
Cloakroom	checkroom
Cooker	stove
Counterfoil	stub
Disc	disk
Dust bin	garbage can
Earth	ground
Eject	send off
Engine driver	engineer
Ensure	insure
Essay	paper
Extra time	over time
From Monday to Friday	Monday through Friday
Fire brigade	fire department
Fire engine	fire truck
Flat	apartment
Film	movie
Flask	thermos
Full stop	period
Flyover	overpass
Football	soccer
Foundation course	introductory course
Frost	ice
Grey	gray
Got	gotten
Glycerine	glycerin
Grill	broil
Ground floor	first floor
Handbag	purse
Hire purchase	installment plan
Holiday	vacation
Horror film	horror movie
Hire	rent
Hairpin bend	hairpin turn

In-built	built-in
Indicator	turn signal
Interval	intermission
Jewellery	jewelry
Knickers	panties
Lawyer	attorney
Letter box	mail box
Lift	elevator
Lorry	truck
Luggage	baggage
Line	queue
Long-sighted	far-sighted
Lunch room	dining hall
Maize	corn
Moderator	mediator
Mineral water	bottled water
Mobile phone	cell phone
Notice board	bulletin board
Number plate	license plate
Parcel	package
Post	mail
Pram	baby carriage
Pyjamas	pajamas
Quarter to two	quarter of two
Quarter past two	quarter after two
Race course	race track
Rack	frame
Ring	call
Rubbish	garbage
Railway	railroad
Skipping rope	jump rope
Sanatorium	sanitarium
Scrub	scratch
Time table	schedule
Term	semester
Tick	check
Toilet	bath room
Torch	flash light
Tournament	tourney

Trade fair	trade show
Traffic police	traffic cops
Trolley	cart
Trousers	pants
Truck	car
Tyre	tire
Teleprinter	teletypewriter
Value	appraise
Veranda(h)	porch
Wagon	freight car
Waistcoat	vest
Warehouse	storehouse
Wind	gas

CHAPTER 17

Editing (Punctuation, Spelling and Grammar)

PUNCTUATION

The following are the Punctuation Marks in English.

1. Full Stop or Period (.)
2. Comma (,)
3. Semicolon (;)
4. Colon (:)
5. Note of Interrogation (?)
6. Note of Exclamation (!)
7. Inverted Commas (or) Quotation Marks (‘ ’ “ ”)
8. Dash (—)
9. Parentheses ( )
10. Hyphen (-)
11. Apostrophe (’)
12. Capital Letters (A B C D ……)

1. The Full Stop (.)

The full stop represents the greatest pause and separation. It is used

(a) To mark the end of a declarative sentence. (i.e. a sentence which makes a statement)
He is the best worker in our factory.

(b) To close an imperative sentence (i.e. one which commands, makes a request to which an answer is taken for granted, or entreats)
(i) Eat your rice. (command)
(ii) Please stop banging the door. (entreaty)
(iii) Will you please come in. (answer taken for granted)

(c) After abbreviations and initials; as
Approx. (approximately)
Advt. (Advertisement)
Asst., M.A., I.A.S.
A.B. Smith, Dip. Ed.

Note that in current English Mr and Mrs occur without a full stop, as these have come to be regarded as the full spellings.

(d) To indicate a decimal fraction or rupees and paise.
(i) 55.8% (ii) 10.5 (iii) $8.30

2. Comma (,)

The comma represents the shortest pause, and is used:

(a) To separate a series of words in the same construction.
He lost lands, money, reputation, and friends.
He wrote his exercise neatly, quickly, and correctly.
Note: A comma is generally not placed before the word preceded by *and*.

(b) To separate each pair of words connected by *and*.
High and low, rich and poor, wise and foolish.

(c) After a Nominative Absolute.
The wind being favourable, the squadron sailed.

(d) To mark off a Noun or Phrase in Apposition.
Milton, the great English poet, was blind.
Joan Thomas, the wife of a well-known politician, is still missing.

(e) To mark off the Nominative of Address or Vocative.
Come into the garden, Maud.
Mother, may I go out?
Tell me, Mother, may I go out?

(f) To separate phrases in a series.
She gave Mum a purse, Dad a tie, and me a book.

(g) Before and after a Principal Phrase, provided that the phrase might be expanded into a sentence, and is not used in a merely qualifying sense.
Caesar, having conquered his enemies, returned to Rome.

(h) Before and after words, phrases, or clauses, let into the body of a sentence.
He did not, however, meet his father.
It is, after all, your duty.
His behaviour, to say the least, was very rude.
His story was, in several ways, improbable.

(i) To indicate the omission of a word, especially a verb.
Lina was wearing a red dress; Lisa, a blue one.
Rama received a fountain pen; Hari, a watch.
He was a Brahmin; she, a Rajput.

(j) To separate short co-ordinate clauses of a Compound sentence.
I came, I saw, I conquered.
The way was long, the wind was cold.

(k) To mark off a direct quotation from the rest of the sentence.
"Why," he said, "I was only looking in the cupboard for something to eat."
John said, "I can do it."

(l) Before certain Co-ordinative conjunctions.
To act thus is not wisdom, but folly.

(m) To separate a Noun Clause-whether subject or object-preceding the verb.
Whatever is, is right.
How we are to get there, is the question.

(n) To separate a clause that is not restrictive in meaning, but is co-ordinated with the Principal clause.
Sailors, who are generally superstitious, say it is unlucky to embark on a Friday.

(o) To separate an Adverbial clause from its Principal clause.
When I was in London, I was very happy.

(p) To separate the parts of a date from one another and from any words following the date.
On Monday, October 29,1929, the stock market crashed.

(q) To separate the parts of an address.
Our house in Kuala Kangster, Perak, was built in June, 1974.
Sent entries to:
Jetset Quiz,
Box 549,
Singapore.

(r) After the salutation and after the complimentary close of any letter.
Dear John,
Yours sincerely,

(s) To separate introductory expressions like Yes, No, Oh, and Well.
Yes, I can be there by 2 p.m.
Oh, I haven't heard that rumour.
Well, we'll see if we can come.

(t) Between two or more adjectives of equal rank when the conjunction is omitted.
The curator of the museum was a helpful, polite, interesting man.

(u) To set off words that change a statement into a question or an exclamatory sentence.
You are going, aren't you?
This is fun, isn't it?

(v) Wherever it will present ambiguity, i.e. misreading a sentence.
With Lata, Kishore hurried to the staff room.

(w) To set off sharply contrasting expressions.
Liquid, not a powder, should be used.
I meant to give money, not labour.

3. Semicolon (;)

The semicolon is a mark of equality. Stronger than a comma but weaker than a full stop, it marks a pronounced pause (but not a stop) between two complete statements. The semicolon indicates that these statements are so closely related that they are written as one.

The semicolon is used:

(a) To separate the clauses of Compound sentence, when they contain a comma.
He was a brave, large-hearted man; and we all honoured him.

(b) To separate a series of loosely related clauses.
Today we love what tomorrow we hate; today we seek what tomorrow we shun; today we desire what tomorrow we fear.

(c) Between independent clauses not connected by a conjunction.
Farah is quiet and studious; Rosalind is noisy and active.

(d) Before such expressions as however, then, moreover, nevertheless, hence, thus, for instance, consequently, that is, and therefore, if they come between independent clauses not connected by a conjunction.
Our Science teacher insists on accuracy; therefore I prepare my experiments carefully.

4. Colon (:)

The colon marks a still more complete pause than that expressed by the Semicolon. It is used (often with a dash after it):

(a) To introduce a quotation.
Bacon says: "Reading maketh a full man, writing an exact man, speaking a ready man."

(b) Before enumeration, examples, etc.
The Principal parts of a verb in English are: the present tense, the past tense, and the past participle.

(c) Between sentences grammatically independent but closely connected in sense.
Study to acquire habit of thinking: no study is more important.

5. Note of Interrogation (?)

The note of interrogation is used, instead of the full stop, after a direct question.
Have you done your home work?
Do you know English?
How are you?
Can you do it?

6. The Note of Exclamation (!)

The note of exclamation is used after interjections and after phrases and sentences expressing sudden emotion or wish.
Alas !
Oh dear !
Long live the King !
What a pity !

7. Inverted Commas (" "and ' ')

(a) Inverted commas are used to enclose the exact words of a speaker, or a quotation.
My mother said to me, "You are very untidy."
He said, " I am going home."

(b) If a quotation occurs within a quotation, it is marked by single inverted commas.
"This" he said, " is like saying ' might is right'."

(c) Use quotation marks (single or double) to draw special attention to a word or words.
The island of Penang is sometimes called 'the Pearl of the Orient.'

(d) Use quotation marks to indicate the titles of books, films, plays, songs, stories, works of art, and radio and television programme titles.
Charles Dickens wrote 'Oliver Twist'.
The other day I read Hopkin's poem 'Pied Beauty'.

8. Dash (—)

The dash is used:

(a) To indicate an abrupt stop or change of thought; as,
If my husband were alive — but why lament the past?

(b) To resume a scattered subject; as,
Friends, companions, relatives — all deserted him.

9. Parentheses ( )

Parentheses or Double Dashes are used to separate from the main part of the sentence a phrase or clause which does not grammatically belong to it.

(a) He gained from Heaven (it was all he wished) a friend.

(b) A remarkable instance of this kind of courage—call it, if you please, resolute will—is given in the history of Babur.

10. Hyphen (-)

The hyphen (-) a shorter line than the Dash(—) is used to connect the part of a compound word.
Father-in-law, Commander-in-Chief, Passer-by, Jack-of-all-trades, etc.

11. Apostrophe (')

The apostrophe is used:

(a) To show the omission of a letter or letters.
Don't, can't, I've, e'er

(b) To form the possessive of any singular noun, add an apostrophe and 's' to the noun.
Gopal's book.

(c) To form the possessive of a plural noun ending in 's' add only an apostrophe.
Her parents' influence. A boys' school.

(d) To form the possessive of a plural that does not end in 's', add an apostrophe and 's':
Children's shoes, policemen's duties, men's clothing.

(e) Use the apostrophe to show possession with indefinite pronouns.
Everyone's duty.
Somebody's socks.
Note: Somebody else's job.

(f) Use no apostrophe in personal, interrogative, or relative possessives.
Ours, yours, its, hers, theirs, whose.
Note: Do not confuse the contractions it's and who's with the possessives its and whose.

(g) Use the apostrophe with expression of time, space and amount (value).
A three week's holiday
A day's leave
A dollar's worth

(h) In writing the possessive of a compound noun, add an apostrophe plus 's' to the last word of the compound.
Mother-in-law's house.
Editor-in-Chief's opinion.

(i) Use the apostrophe to make contractions of words or numbers.
O' clock (of the clock)
In the year '45 (1945)

(j) Use the apostrophe to form the plurals of letters, figures, signs, or words used simply as words.
The number 771318 contains two 7's and two 1's.
There are two M.A.'s, four B.A.'s and nine B.Sc.'s on the staff.
P's and q's
5's, 2's, 10's

12. Capital Letters

(a) A sentence begins with a capital letter.
He is a student.
Today is a working day.

(b) Each fresh line of poetry begins with a capital letter.
Jack and Jill
Went up the hill
To fetch a pail of water.

(c) Capitals are used to begin Proper Nouns and Adjectives derived from them; as,
Delhi, Rama, Africa, African, Shakespeare, Shakespearian

(d) All nouns and pronouns which indicate the Deity are capitalised;
as, Heavenly Father.

(e) Capitals are used to write the pronoun I and the interjection O.

(f) Capitalise the names of:

(i)	Persons	:	John, Gopal
(ii)	The days of the week	:	Monday, Tuesday
(iii)	The months	:	January, February
(iv)	Religions and religious Denominations and other Religious terms	:	Islam, Christianity, Hinduism, Easter
(v)	All countries	:	India, China
(vi)	Nationalities	:	Indian
(vii)	Races	:	The Aryan race
(viii)	Languages	:	English, Tamil
(ix)	Special organisations, such as schools, businesses, mosques, churches, or political parties	: :	Anna University, Govt. Higher Secondary School, Rotary Club, Communist Party
(x)	Buildings	:	L.I.C. building
(xi)	Trains	:	The Kovai Express
(xii)	Ships	:	The Queen Elizabeth
(xiii)	Planes	:	Singapore Airlines
(xiv)	Holidays, special or important events	:	Chinese New Year National Day Celebrations Independence Day Christmas Day
(xv)	Bays	:	The Bay of Bengal
(xvi)	Seas	:	The Arabian Sea
(xvii)	Oceans	:	The Pacific Ocean

(g) Capitalise specific geographic and place names.
The Sahara Desert

(h) Capitalise the first word of a direct quotation.
He said, "It is wrong on your part to say so."

(i) Capitalise the titles of literary, musical and art works.
Paradise Lost
The Billy Boy (painting)

(j) Capitalise the names of subjects.
In the first year of University he took three subjects: Biology, Chemistry and Physics.

(k) Capitalise titles of persons, including degrees, and their abbreviations when used as part of a proper name.
John D. Rockefeller, Jr. founded Rockefeller Centre.

(l) Capitalise the official names of government departments, the titles of high ranking officials, and names of legislative bills and acts.
The Ambassador, the Secretary of State, the Prime Minister, President Tito, the Department of Inland Revenue, the Treaty of Versailles.

(m) Capitalise the names of objects, animals, seasons, and ideas, when treated as if they were human.

'Sport, that Wrinkled care derides,
And Laughter holding both his sides.' - Milton.

(n) Capitalise north, south, east and west and their derivatives. (e.g. northern, south-west) when they refer to sections of a country or the world. Do not capitalise these words to indicate direction only.
President Snow is going on a tour of the Far East.
Turn east at the next corner.

(o) Captialise the first word and all nouns in the salutation of a letter, as well as the first word of the complimentary close.
Dear Uncle Tony
My dear
Yours sincerely

EXERCISE I

I. Punctuate the following.

1. she has had an operation in the ear her husband says I have a real problem with my wife who behaves like a 56 year old teenager (M.Q.P.)
2. are there any advantages in the computerisation of work in large establishments if so what are they (M.Q.P.)

II. Punctuate the following passages.

1. the united nations objective is to provide clean drinking water for every person around the globe by the year 1990 several ways of doing this were discussed (Oct. 2000, M.Q.P., 2001)
2. ramanujan was born in 1887 in the town of erode in southern india and grew up in the nearby town of kumbakonam where his father was an accountant for a cloth merchant although his family was middle class he was actually very poor (M.Q.P., Apr. '97, Apr. '96)
3. consequently the department of physics and astrophysics has issued its own dos and donts. (Apr.'94)
4. after the recent scare in the us its the delhi universitys turn. (Apr.'97)
5. no he didn't put it in his pocket he may have thought he had put it in his pocket but in fact he dropped it. (Nov.'97)
6. in canada for instance beavers are now reintroduced into certain areas by means of aeroplanes the animal is put in a special box attached to a parachute and when the plane flies over the area it drops the case and its beaver passenger out. (Apr.'98)

7. the chairman said your company has done very well this year and the profit before tax has risen from last years rs 80 lakhs to 120 lakhs this year (Nov.'98)
8. amartya sen was awarded the nobel prize (Apr.'99)
9. indian cars are being exported to europe (Nov.'99)
10. rabindranath tagore who was awarded the nobel prize for his gitanjali was a great indian poet (Apr. 2000)
11. marys boy friend didnt turn up (Oct. 2000)
12. though virtual realtiy is considered to be an industry still in its infancy its applications seem limited only by our imagination the term virtual reality is credited to jaron lanior who founded a company named vpl research
13. although there is virtually no production in India the encyclopaedia britannica estimates that india has perhaps the largest accumulated stocks of silver in the world according to the reserve bank of india estimates in 1967 there were about 5000 million ounces (Apr.'94)
14. in 1909 when ramanujan was 22 he married nine year old janaki and took a clerical position in the madras port trust office to support her and his mother who lived with them (Nov.'94)
15. in the past only highly trained computer experts were able to use computers but as they became cheaper and smaller and easier to operate many people are now finding that a computer can help them (Apr.'95, Apr.'97)
16. compared to a motorbike or car the bicycle is a slow moving vehicle but its popularity has been on the increase in recent years (Oct.'95)
17. spread over five hectares the joint indo us plant is located in one of the most industrially backward areas of andhrapradesh (Apr.'96)
18. more than twenty years ago indian airlines decided to computerise some of their operations these were to begin with financial control and inventory control (Oct.'96)
19. although there is evidence to show that some form of printing was known in ancient times it was printing by movable type that constituted a turning point in the development of printing the invention of printing as we know today is ascribed to johanngutenberg (Oct.'97)
20. it has often been said that electronic media such as television and video cassette recorders and indeed the computer itself with its special language will soon render our children illiterate as far as printed word goes while our own reliance on reading will hasten our obsolescence (Apr.'98)
21. our time is running out says deborah thiagarajan of madras (Oct.'98)
22. but its the lazy people who invented the wheel and the bicycle because they did not like walking or carrying things we have made the world a better place havent we (Nov.'96)
23. salim ali was one of the most restless of men and the story of his extraordinarily long life spent mostly in the open constitutes a glorious chapter in the history of world ornithology the pioneer indian ornithologist and environmentalist has made a sterling contribution to the field of ornithology his life was avidly dedicated to the study of birds in their natural habitat (Apr.'96)
24. the english language came to england with the germanic tribes who overran england in the fifth century old english borrowed many words from scandinavian language (Apr.'96, Nov.'96)
25. oil the major source of energy in the world today has had a dramatic effect on the worlds economy until quite recently the demand for oil seemed unlimited (Apr.'97)
26. srinivasa ramanujan a poor uneducated indian born a hundred years ago was one of the greatest and most unusual mathematical geniuses who ever lived (Apr.'96)
27. ramu said sita why don't you go to madras on sunday (Nov.'96)

III. Punctuate the following passage.

1. the wheel is a universal discovery one of the few we know the egyptians are known to have used the wheel thousands of years ago but it seems the wheel was an independent discovery of many early civilisations the pottery wheel of the kotas of the nilgiris is very different from the usual potters wheel one has seen one of the main features of this wheel is that a thrower never rotates the wheel this is done by her helper who moves the wheel is an anti-clockwise direction the traditional wheel is constructed with clay and the moving parts are made from stone both men and women are involved in its construction the durability of the wheel is surprisingly high these wheels can be used for more than thirty years though its body may get crumbly its movement is excellent and it seems that this wheel becomes better with age its body is clay but its soul is stone.
2. around kulu-manali, the solang nala is heavily frequented and thus quite badly affected the rohtang road also causes spillover damage to the vegetation and the entire kulu region is devoid of pleasant life and certain alpine flowering plants too have disappeared.
3. the centre for water resources college of engineering took up an appropriate technology project in 1976 and completed it in 1978 this project is a practical project specially designed to suit rural conditions in india since the villages in india face acute power shortages it was hoped that this project when implemented would prove a boon to the rural masses
4. a quiet diminutive man p.k. ghosh spelled a different universe he was a literature buff fairly late in life he chose to set up a printing press the money for which was provided by relatives it was a printing press of the ordinary mould and yet with a difference
5. the writer rabindranath tagore who won the nobel prize for literature in 1913 was also a painter tagores nephew rabanindranath and his followers tried to combine indian painting traditions with other asian styles
6. nusrat fateh ali khan was a missionary khans mission in his own words was to spread a message of peace and love by singing from the depth of my heart and he did so with a great passion.
7. paterson got out of the car and said to the man im very sorry it was my mistake I didnt see you as i was lost in the beauty of the place —— and the dog is it yours the man said yes its mine I am sorry that I killed your dog I dont know how I can make amends.
8. the chairperson said the unit to be started in mysore will be able to benefit from several incentives and backward-area concessions offered by the karnataka government.
9. compared to a motorbike or car the bicycle is a slow moving vehicle but its popularity has been on the increase in recent years. (Oct.1995)
10. now that salim ali is no more who will speak about ecology and conservation with passion and fearlessness ornithology will receive a spurt only if people take greater interest in nature even the so called scientific temper is born of ones interest in nature. (May 2001)

SPELLING

Correct the spelling mistakes.

Examples

I.

1. tiffen
2. skillful
3. grammer
4. truely
5. duely
6. Your's faithfully
7. fulfill
8. Ist
9. liquified
10. commitee
11. accomodation
12. prevelage
13. enterance
14. pronounication
15. twelveth
16. momento
17. tempervary
18. calender
19. inspite of
20. begining
21. alright
22. oppurtunity
23. catagory
24. dicpline
25. deisel
26. wiegth
27. vaccum
28. independant
29. parallel
30. hight
31. governer
32. goverment
33. cooly
34. speedometre
35. accelerater
36. angryly
37. landry
38. protien
39. benefitted
40. proffessor

Answers

1. Tiffin
2. skilful
3. grammar
4. truly
5. duly
6. Yours faithfully
7. fulfil
8. I
9. liquefied
10. committee
11. accommodation
12. privilege
13. entrance
14. pronunication
15. twelfth
16. memento
17. temporary
18. calendar
19. in spite of
20. beginning
21. all right
22. opportunity
23. category
24. discipline
25. diesel
26. weigth
27. vacuum
28. independent
29. parallel
30. height
31 governor
32. government
33. coolly
34. speedometer
35. accelerator
36. angrily
37. laundry
38. protein
39 benefited
40. professor.

II.

1. prohibitted
2. septick
3. maintainance
4. seperate
5. definately
6. comparitive
7. reducable
8. servicable
9. stupify
10. resistable
11. remmitance
12. dependible
13. tommorow
14. irrelevent
15. blueish
16. curriculam
17. tarrif
18. supercede
19. hygeine
20. batchelor
21. lable
22. continous
23. millenium
24. recieve
25. matress
26. awefully
27. digestable
28. gaurdian
29. transfered
30. celeberation
31. repeatition
32. sieze
33. innoculate
34. procede
35. occurrance
36. occassion
37. advantagous
38. tution
39. greatful
40. valueable

Answers

1. prohibited
2. septic
3. maintenance
4. separate
5. definitely
6. comparative
7. reducible
8. serviceable
9. stupefy
10. resistible
11. remittance
12. dependable
13. tomorrow
14. irrelevant
15. bluish
16. curriculum
17. tarrif
18. supersede
19. hygeine
20. batchelor
21. label
22. continuous
23. millennium
24. receive
25. mattress
26. awfully
27. digestible
28. guardian
29. transferred
30. celebration
31. repetition
32. seize
33. inoculate
34. proceed
35. occurrence
36. occassion
37. advantageous
38. tuition
39. greatful
40. valuable

III.

1. tobaco
2. superfisial
3. ignorence
4. hinderance
5. serpant
6. existance
11. liqor
12. que
13. obediance
14. mosqito
15. benifit
16. garantee

7. lemanade
8. regreted
9. archestra
10. ambassadar
17. psycology
18. particuler
19. influance
20. dysentary

Answers

1. tobacco
2. superficial
3. ignorance
4. hindrance
5. serpent
6. existence
7. lemonade
8. regretted
9. orchestra
10. ambassador
11. liquor
12. queue
13. obedience
14. mosquito
15. benefit
16. guarantee
17. psychology
18. particular
19. influence
20. dysentery

IV.

1. parachute
2. dillema
3. chocklate
4. arithmatic
5. mamorandum
6. oraly
7. convertable
8. permissiable
9. changable
10. hypocrysy
11. milage
12. quarel
13. faminine
14. laberatory
15. burgler
16. indelable
17. combustable
18. brakable
19. eligeble
20. admissable.

Answers

1. parachute
2. dilemma
3. chocolate
4. arithmetic
5. memorandum
6. orally
7. convertible
8. permissible
9. changeable
10. hypocrisy
11. mileage
12. quarrel
13. feminine
14. laboratory
15. burglar
16. indelibel
17. combustible
18. breakable
19. eligible
20. admissible

V.

1. teknology
2. devulped
3. catre
4. premetive
5. apropriate
6. tradishional
7. particulerly
8. skiled
9. feeture
10. veriety

Answers

1. technolgy
2. developed
3. cater
4. primitive
5. appropriate
6. traditional
7. particularly
8. skilled
9. feature
10. variety

VI

1. afordable
2. resorces
3. culteraly
4. acceptible
5. environemetaly
6. operasion
7. meterial
8. unpoluting
9. fisycal
10. pedel

Answers

1. affordable
2. resources
3. culturally
4. acceptable
5. environmentally
6. operation
7. materials
8. unpolluting
9. physical
10. pedal

VII

1. musle
2. necesities
3. igzample
4. bycycle
5. internel
6. combuschen
7. elektric
8. fuals
9. inovative
10. seriusly

Answers

1. muscle
2. necessities
3. example
4. bicycle
5. internal
6. combustion
7. electric
8. fuels
9. innovative
10. seriously

VIII

1. abundent
2. potantial
3. reelized
4. roteting
5. modyfied
6. duel-purpose
7. pumbs
8. impliments
9. permenant
10. atachment

Answers

1. abundant
2. potential
3. realized
4. rotating
5. modified
6. dual-purpose
7. pumps
8. implements
9. permanent
10. attachment.

According to Oxford Dictionary the essence of editing is to make the context and style of literary, artistic or musical work, more presentable.

Examples

1. Edit the following passage. (M.Q.P.)
   The aim of the authors are to describe about the benifits in computerisation and to suggest solutions to the problem of unemployment.

Answer

The aim of the authors is to describe the benefits of computerisation and to suggest solutions to the problem of unemployment.

2. Edit the following passage by correcting the mistakes in grammar and spelling. (Nov./ Dec. 2002)
In the coming dicades road transport has face serius problems. The dencity of automobile trafic in the sities will being so high, that the roads will hardly be able to accommodated them.

Answer

In the coming decades road transport will face serious problems. The density of automobile traffic in the cities will be so high, that the roads will hardly be able to accommodate them.

3. Edit the following passage by correcting the mistakes in grammar and spelling, without changing the meaning of the passage. (Apr./May 2003)
Technology is an mixed package : it has its benifits and its drawback. Technology are the power dirived from the aplication of knowlege. This power has been sought to be utilised to improved the standards of living of people all over the world.

Answer

Technology is a mixed package : it has its benefits and its disadvantages. Technology is the power derived from the application of knowledge. This power has been sought to be utilised to improve the standards of living of people all over the world.

4. Correct the mistakes in the English in the given passage. (Nov. / Dec. 2003)
One of the world's major source of energy are oil. We depend on it for heating, as fuel for transportation and generate of power. Crude mineral oil come out of the earth as a thick brown or black liqued with a strong smell. It is a complex mixtures of many different substance.

Answer

One of the world's major sources of energy is oil. We depend on it for heating, as fuel for transportation and for generation of power. Crude mineral oil comes out of the earth as a thick brown or black liquid with a strong smell. It is a complex mixture of many different substances.

5. Correct the mistakes in the English in the given passage: (Apr. / May 2004)
A famlier sigth in the Indian countriside these days is a gulvanised box - like steel structure with a long, sterdy handle monted on a masseve pedestel.

Answer

A familiar sight in the Indian countryside these days is a galvanised box-like steel structure with a long sturdy handle mounted on a massive pedestal.

6. Correct the mistakes in English in the following passage. (Jan. 2005)
Oil, the major sources of energy in the world today have had a dramatic effect in the worlds economy. Until quiet recently, this demand for oil seems unlimited. This enormous demands motivate several multinational companies to invest in location of large deposits.

Answer

Oil, the major source of energy in the world today, has had a dramatic effect on the world's economy. Until quite recently, the demand for oil seemed unlimited. This enormous demand motivates several multinational companies to invest in location of large oil deposits.

EXERCISE II

Correct the mistakes in the given passages.

1. The first computer to be developed were all large mainframe computers, and these type of computer is still very much today used.
2. A modern mainframe is can carry out many different job at same time and can be use simultaneous with many users.

3. Each user accesses the mainframe through a terminal who acts as input device and output device both.
4. The store backing for a mainframe is keeped on magnetic tapes which are kept in data storage cabinets. A very large strong back known as a databank.
5. Nowadays, mainframes are in common use by large organisations such as airlines, railways and hotel chains for to centralise their bookings and reservations. Any number of terminals can to be situate anywhere in the world.
6. Minicomputers are cheapest, smallest and slowest than mainframes. They rarely occupy more than one room, and often used for a particular kind of work, such as data analysis in a research laboratory.
7. They often known as PCs (personal computers) since there are enough cheap for some individuals to buy.
8. Micros are even found in some primary school in countries such as India, Russia and the UK which are trying to encourage a new generation of computer – literate children.
9. Nuclear fuel such as uranium and plutonium is radioactive. They gives out dangerus and very penetrative radiation. During fission even more radiation are produced. This radiations is harmfull even in small quantitys. (Dec. 2001)
10. Agravation of currant constraints would spel disaster for the inviting prospectus now looming large in the horyzen. A possitive approach is called for to revurse the negative trund. (May 2001)
11. It is everyone agrees, a colosal task that the child perform when he learns to speek, and fact that he does so in so short a period of time challenge explenation Language learning begin with listening. Individual children wary greatly in the amount of listening they do before they start speaking, and late starters are often long listners. (May 2002)
12. Faradays experiments wear only the first steps but he had shown quiet clearly that magnets could be use to produce an electric curent. (May 2002)

EXERCISE III

Edit the following passage by correcting the mistakes in spelling, grammar and punctuation.

1. From the ekonomic point of view, solar cookers are idle cooking devises far rurel india. But whan one concider the time factar, they proove to be weary disapointing. Ardinery solar cookers are best sooted for foots that rekwair slow boiling such as stews, cerels and vegitibles.
2. Perhaps sum of the solusions to our energy problems will come from increesingly effisient and cheep solar sells and super kunducting devises and transmision, but most of our energy needs will continued to be met by improved, power generating plants, internal combuschon engines and other devises that have been around far a long taim.
3. In imaginning the role of tecknology in the twentyfirst sentury, we should not loose site of the fact that many of our problem can be solved only with 'low' tecknology.
4. This 'comunity taip hybrid soler cuker' was design baring in mind cast and time both.
5. Rise husk is obtain from rise mils. It is produce in such large kwantity that it's dispozal sometime become a problem. Most of it is use as fual and livestok litre.
6. (a) managable (b) tendancy (Nov./Dec. 2003)
7. Bamboos have been use by humen beings since time immemorial. But it is only in the last four to five dicades that industries have came to recognise their value. owing to the instalation of india paper mills in bamboo has become a valuable resourse. (Apr./May 2004)
8. In 1973, the oil rich countries come to realise that if they act together, their oil deposits could be a sourse of great power and welth and their action of increase the price of oil immediately afterwards, almost hold the developped countries to ransum.

CHAPTER 18

Writing Definitions and Descriptions

1. **Abacus** frame with beads sliding back and forth on wires for doing arithmetic sums.
2. **Accelerator** a device for increasing speed, especially the pedal in a vehicle that controls the speed of the engine.
3. **Access time** the time taken to obtain information stored in a computer.
4. **Accumulator** a temporary storage device used in a microprocessor.
5. **Acid** any of the class of substances containing hydrogen that can be replaced by a metal to form a salt. Acids are usually sour and can often destroy things they touch.
6. **Address bus** a set of wires used to transmit the address.
7. **Aerodrome** a small airport used mainly by private aircraft. (Refers to the physical facilities for the air base).
8. **Aerodynamics** the science dealing with the forces acting on solid bodies, e.g. Aircraft or bullets moving through air.
9. **Aeronautics** the scientific study or practice of constructing and flying aircraft.
10. **Air brake** a brake, e.g. For a bus or train worked by air pressure (operated by the compressed air on a piston).
11. **Aircondition** a system that cools and dries the air in a room or building. (A method of filtering air and regulating its humidity and temperature in a room or building).
12. **Airconditioner** an air-conditioning machine that cools and dries the air in a room or building.
13. **Aircraft** any machine or structure that can fly in the air and carry goods or passengers.
14. **Airport** a large area where aircraft land and take off, usually with facilities for passengers and goods, and customs.
15. **Air pump** a machine for removing or compressing air. (a device for pumping air into or out of something)
16. **Algorithm** a set of rules or procedures that must be followed in solving a particular problem.
17. **Alloy** a metal formed by a mixture of metals or of metal and another substance. eg., Brass is an alloy of copper and zinc.
18. **Ammeter** it is an instrument to measure current.
19. **Amplifier** a device for amplifying or increasing something, especially sounds or radio signals.
20. **Analog channel** a communication plate used for transmitting and receiving continuously varying electrical signals.
21. **Angle** the amount of distance between the directions of two lines or surfaces where they meet; a line, direction of movement, etc., considered in relation to the ground.

22. **Anode** the positive terminal of a device.
23. **Anvil** an iron block on which a blacksmith puts hot pieces of metal before hammering them into shape.
24. **Antennae** an arrangement of wires, metal rods used in sending and receiving electromagnetic signals.
25. **Assembly language** a low level programming language in which mnemonics are used to code operations and alphanumeric symbols for address.
26. **Asynchronous communication** communication between units operating independently.
27. **Atmosphere** the mixture of gases that surround the earth.
28. **Audio cassette tape** a device to hear the recorded voice of a person, an instrument.
29. **Auditorium** the part of a theatre, concert hall, etc., in which the audience sits.
30. **Autorickshaw** a covered motor vehicle with three wheels, a driver's seat in front and a seat for passengers at the back.
31. **Ballpen hammer** it is a tool consisting of a metal head and handle used for pounding.
32. **Barometer** an instrument for measuring air pressure, used especially for forecasting the weather.
33. **Batch operating system** a system programme facilitating execution of a series of user programmes without any manual intervention.
34. **Bearing** a device that allows part of a machine to turn smoothly.
35. **Biogas plant** the machinery, equipment, etc., for manufacturing gas from animal waste and used for commercial purposes or in homes.
36. **Bit** a binary digit which is either 0 or 1; the most basic unit of information in a computer.
37. **Boiler** a metal container in which water is heated, e.g., to produce steam in an engine.
38. **Brake** a device for slowing or stopping a car, bicycle, train, etc.
39. **Bridge** a structure of wood, iron, concrete, etc., built to provide a way across a river, road, railway, etc.
40. **Bus** a set of wires carrying a group of bits in parallel and has an associated control scheme.
41. **Byte** a group of eight bits used to represent characters.
42. **Bulb** the glass part of an electric lamp that gives light.
43. **Cache memory** a small high speed memory used to temporarily store portion of a programme for the main memory.
44. **Calculator** a small electronic device for performing calculations with numbers.
45. **Camera** an apparatus for taking photographs, moving pictures or television pictures.
46. **Camcorder** a camera which records moving pictures and sound.
47. **Capacitor** it is an energy storing device.
48. **Carburettor** an apparatus in a petrol engine, especially in a motor vehicle. Petrol and air are mixed together in a carburettor to make the explosive gas which provides power.
49. **Cassette** a case that contains a magnetic tape for use in a tape recorder.
50. **Catalyst** a substance that makes a chemical reaction happen faster without changing itself.

51. **Cathode** the negative terminal of a device.
52. **Chip** a small piece of silicon in a computer, with electronic circuits for storing information or performing complicated logical operations.
53. **Circle** a round space enclosed by a curved line, every point on the line being the same distance from the centre.
54. **Circuit** an apparatus through which an electric current flows.
55. **Code** a system of words, letters, symbols, etc., that represent others, used for secret messages or for presenting or recording information briefly.
56. **Compass** a device for finding direction, with a needle that always points to the north.
57. **Compiler** a system programme to translate a high level language programme to machine language.
58. **Computer** an electronic device for storing and analysing information fed into it, for calculating, or for controlling machinery automatically.
59. **Computer graphics** concerned with picture generation, manipulation and display by a computer.
60. **Computer programme** a computer programme is a set of instructions which tells a computer what to do.
61. **Computer virus** a hidden code within a computer program intended to cause errors and destroy stored information.
62. **Concrete** building material made by mixing cement with sand, small stones and water.
63. **Control unit** it controls the operations of all the units of a computer.
64. **Cooker** an appliance for cooking, consisting of an oven, a heating furnace and often also a grill. Most cookers use gas or electricity for producing heat.
65. **Coolant** a liquid that is used for cooling an engine, a nuclear reactor, etc.
66. **CPU** Central Processing Unit. It is the heart of the computer that executes all the instructions given to it.
67. **Cylinder** the hollow part inside which the piston moves in an engine.
68. **Dam** a barrier made of concrete, earth, etc., built across a river to hold back the water and form a reservoir to prevent flooding, etc.
69. **Disk** a circular plate on which data can be recorded in a form that can be used by a computer.
70. **Distillation** it is a process of separating more volatile substance from less volatile by heating the mixture.
71. **Domestic pump** A machine for forcing water from a well through a pipe.
72. **Dual purpose bicycle** It is a bicycle serving two purposes. It can be used both as a vehicle for transportation and as a prime mover.
73. **Earth** a wire that provides a connection with the ground and completes an electrical circuit.
74. **An electric fuse** (in an electrical circuit) a short piece of wire that melts and breaks the circuit if the current goes above a safe level.
75. **Electronics** the branch of science and technology that deals with the behaviour of electric currents in electronic equipment.
76. **Expedition** an organised journey or voyage for a particular purpose especially scientific research, exploration or war.
77. **Factory** a building or group of buildings where goods are manufactured or assembled.

78. **Fan** — a device with blades that are operated mechanically to create a current of cool air.
79. **Fax machine** — a device for sending a copy of a document, an illustration, etc., by an electronic system using telephone lines.
80 **Fibre optics cable** — made of glass fibres to transmit light signals.
81. **Flash light** — a device that produces a brief bright light for taking photographs in indoors or in poor light.
82. **Floppy or Diskette or Disk** — a flexible disk for recording and storing data in a form that the computer can read. It is an auxiliary device of a computer.
83. **Flow chart** — a diagram showing the development of something through different stages or processes.
84. **Flutter** — the rapid variation in pitch or volume of recorded sound.
85. **Flux** — the rate of flow of energy over a surface.
86. **Food processor** — a machine that slices, mashes, blends, etc.
87. **Gear** — a set of wheels with teeth on their edges that revolve together to transmit power from a vehicle's engine to its round wheels; a degree of speed or efficiency.
88. **Generator** — a machine for producing electrical energy.
89. **Genetics** — the scientific study of the ways in which different characteristics are passed from one generation of living things to the next.
90. **Gober gas plant** — a simple apparatus used for turning animal wastes into biogas plus nitrogen fertiliser.
91. **Gold** — a precious yellow metal used for making coins, ornaments, jewellery, etc.
92. **Hammer** — a tool with a heavy metal head used for breaking things or hitting nails.
93. **Hardware** — the mechanical and electronic parts of a computer.
94. **Helicopter** — a type of aircraft with large revolving blades but no wings. It can take-off and land in a very small area, and remain in one position in the air.
95. **High technology** — it is advanced development in technology, especially in electronics. It is a sophisticated and complex use of machinery by replacing labour to increase production whose use is realised in capital goods industries.
96. **Ice axe** — an implement used by people climbing mountains for cutting steps, etc., in ice.
97. **Icon** — a small symbol on a computer screen representing a programme that a user may choose.
98. **Immersion water heater** — an electric heater fitted inside a domestic water tank to provide hot water for use in homes.
99. **Induction motor** — it is a prime mover to supply mechanical energy and it is run by three/ single phase AC supply.
100. **Industry** — any large scale manufacturing enterprise.
101. **Interface logic** — electronic circuit used to interconnect I/O devices to CPU or 86 memory.
102. **Joystick** — a stick on a spherical ball moving in a socket used to move the cursor.
103. **Laboratory** — a room or building used for scientific research, experiments, testing, etc.
104. **Laser technology** — technology of producing a beam of radiation by a device that finds innumerable applications, in communications, engineering, science and medicine.
105. **Lathe** — a machine that shapes pieces of wood, metal, etc., by holding and turning them against a fixed cutting tool.

106. **Limestone** a type of white rock, containing calcium, used as a building material and in making cement.

107. **Lubricant** a liquid substance used for moving a machine easily and smoothly.

108. **Map** a representation on paper of the earth's surface or part of it, showing countries, rivers, mountains, oceans, roads, etc.

109. **Mathematics** the science of numbers, quantity and space. Arithmetic, algebra, trigonometry and geometry are some of the branches of mathematics.

110. **Mercury** a chemical element. Mercury is a metal, silver in colour, often found in liquid form and used in thermometers.

111. **Micro computer** a small computer wherein the memory capacity is comparatively less.

112. **Micro film** a film on which extremely small photographs are stored, especially of documents or newspapers.

113. **Microphone** an instrument that changes sound waves into electrical current. It is used for recording or broadcasting speech, music, etc.

114. **Microprocessor** a very small computer, or a unit of one, consisting of one or more microchips.

115. **Microscope** an instrument for making very small objects appear large, especially for scientific study.

116. **Modem** a device linking a computer system for example, a telephone line, through which data can be transmitted at high speeds from one computer to another.

117. **Moderators** a device where the audio frequency and radio frequency signals are moderated.

118. **Moon** the natural body that moves round the earth every 28 days and shines at night by light reflected from the sun; a body that moves round a planet other than the earth.

119. **Multinational company** a company, especially a very large one, that does business in many different countries.

120. **Nozzle** a piece at the end of a pipe or tube, with a narrow opening in it, through which a stream of air or liquid is directed.

121. **Nuclear reactor** a device meant for the production of nuclear energy.

122. **Oscillator** an instrument for producing electrical oscillations.

123. **Padlock** a type of lock with a loop at one side that is opened with a key. It is used for fastening things, eg. two ends of a chain, together.

124. **Parachute** a device attached to people or objects to make them fall slowly and safely when dropped from an aircraft. It consists of a large folded piece of cloth, attached by strings to the person or object, which opens out in the air to form an umbrella shape above them it.

125. **Patent** an official document giving the holder the sole right to make, use or sell an invention and preventing others from copying it.

126. **Petrol** a liquid obtained by refining petroleum, used as fuel in car engines, etc.

127. **Petroleum** mineral oil that forms under the ground or the sea and is extracted through holes bored beneath it. Petroleum is refined to produce petrol, paraffin, diesel oil, etc.

128. **Photocopier** a machine used for making photocopies.

129. **Picnic** a short pleasure trip with packed meal taken to be eaten out of doors.

130. **Pilgrimage** a journey made by a pilgrim; a journey to a place associated with somebody something that one respects.

131. **Piston** a round plate or short cylinder, usually of metal, that fits closely inside a tube and moves up and down or backwards and forwards inside it. It is used, for example, in engines to cause other parts to move by means of a rod connecting it to them.

132. **Planet** any of the bodies in space that move around a star (such as the sun) and receive light from it.

133. **Plug** a plastic or rubber device with metal pins that fit into holes in a socket to make an electrical connection.

134. **Potential divider** an arrangement meant for getting variable output voltage.

135. **Potentiometer** an instrument to measure the potential difference.

136. **Pressure cooker** a strong metal pot with a tight lid in which food can be cooked quickly by steam under high pressure.

137. **Printer** a machine for printing text onto paper, especially one linked to a computer.

138. **Program** a series of instructions in code that control the operations of a computer.

139. **Propeller** a device with two or more blades fixed to a revolving rod for propelling a ship or an aircraft.

140. **Protractor** an instrument usually in the form of a semi-circle with degrees (0^{o} to 180^{o}) marked on it, used for measuring and drawing angles.

141. **Projector** an apparatus for projecting photographs or films onto a screen.

142. **Radar** a system for finding out the position and movement of solid objects, especially aircraft and ships, when they cannot be seen, by sending out short radio waves which they reflect.

143. **Radiator** a device for cooling the engine of a vehicle or an aircraft.

144. **Reactor** an apparatus for the controlled production of nuclear energy.

145. **Register** a range of human voice or a musical instrument.

146. **Regulator** a device that regulates (controls) something.

147. **Reservoir** a natural or artificial lake used as a source or store of water for a town, etc.

148. **Resistor** a device for providing resistance to electric current in a circuit.

149. **Rheostat** a device for varying the resistance of an electric current.

150. **Rivet** a metal pin or bolt for fastening two pieces of leather, metal, etc., together, one end being hammered or pressed flat to prevent slipping.

151. **Robot** a machine that can perform the actions of a person and which operates automatically or is controlled by a computer.

152. **Satellite** an electronic device that is sent into space and moves round a planet.

153. **Scooter** a light motor vehicle, usually with small wheels, a low seat and a curved metal shield protecting the driver's legs.

154. **Screwdriver** a tool with a blade that fits into the head of a screw to turn it when driving it into place or removing it.

155. **Seismograph** an instrument for detecting earthquakes and for recording how strong they are and how long they last.

156. **Sensor** a device that detects light, heat, pressure, etc.

157. **Software** the data, programmes, etc., not forming part of a computer but used when operating it.

158. **Solar cell** a device that converts the energy of sunlight into electricity.

159. **Solar cooker** an appliance for cooking that uses solar (sun) energy.

160. **Solar water heater** a device for heating water using solar energy.

161. **Spanner** a tool for gripping and turning a nut on a screw.
162. **Spectrum** an image of a band of colours as seen in a rainbow, usually described as red, orange, yellow, green, blue, indigo and violet.
163. **Spring balance** It is an instrument meant for weighing different objects.
164. **Steam** the hot gas that water changes into when it boils.
165. **System software** a set of general programmes written for a computer.
166. **Telephone** a system of sending sound, especially the human voice, to a distance by wire or radio.
167. **Television set** a piece of electrical equipment with a glass screen which shows broadcast programmes with moving pictures and sounds.
168. **Thermometer** an instrument for measuring temperature.
169. **Thermostat** a device for regulating temperature automatically, e.g., in an oven or in central heating.
170. **Thyristor** It is otherwise called silicon controlled rectifier which is a power device.
171. **Telescope** an instrument shaped like a tube with lenses to make distant objects appear larger and nearer.
172. **Tour** i. a journey for pleasure during which various places of interest are visited.
ii. a brief visit, to or through a place.
iii.an official series of visits for the purpose of playing matches, giving performances, etc.
173. **Triangle** a plane figure with three angles and three sides.
174. **Transducer** a device for producing an electrical impulse from another form of energy, e.g., pressure.
175. **Transistor** a small electronic device used in radios, televisions and similar appliances for controlling an electrical signal as it passes along a circuit.
176. **Transformer** an apparatus for increasing or reducing the voltage of an electric power supply, to allow a particular piece of electrical equipment to be used.
177. **T-square** having or forming a right angle, exactly or roughly; not curved.
178. **Turbine** a machine or motor driven by a wheel which is turned by a current of water, steam, air or gas.
179. **Typewriter** a machine for producing writing similar to print. The person using it presses keys which cause raised metal letters, etc., to strike the paper, usually through a ribbon treated with ink.
180. **Underdeveloped country** a country not having achieved a high level of economic development.
181. **UNIX** an operating system with 16 bit micro computers and mini computers.
182. **Uranium** a chemical element. Uranium is a heavy grey, radioactive metal used especially as a source of nuclear energy.
183. **Valve** a mechanical device for controlling the flow of air, liquid or gas, allowing it to move in one direction only.
184. **Virtual memory** a hierarchy of two memory bits.
185. **Voltmeter** it is an instrument to measure the potential difference.
186. **Watch** a small instrument for showing the time worn on a strap on the wrist.
187. **Water heater** a device for heating water.
188. **Windmill** a mill worked by the action of wind on long projecting arms (sails) that turn on a central shaft. A similar tall thin structure used to change the power of the wind into electricity.

189. **Word Processor** — a computer that records typed words, diagrams etc., and displays them on a screen, where they can be corrected or changed and then automatically printed.
190. **Workshop** — a room or building in which machines etc., are made or repaired.
191. **Wrench** — a kind of spanner that can be adjusted to grip and turn nuts of different sizes.

IMPORTANT DEFINITIONS

1. **A dual purpose bicycle**

   A two-wheeler which is pedaled using muscular power and which can be used as a vehicle as well as a power source to operate pumps and lathes.

2. **A Handicap**

   (i) A thing that makes progress difficult, a disadvantage.

   (ii) A serious, usually permanent, physical or mental condition that affects one's ability to walk, see, speak, etc.

3. **A Robot (**also **Automaton)**

   A machine that can perform the actions of a person and which operates automatically or is controlled by a computer.

4. **Appropriate technology** (May 2002, April/May 2005)

   This is a kind of low cost technology of the intermediate type. The accent here is on the appropriateness of the technology used in relation to the cultural and geographical circumstances of people. It arises from the local needs and uses local resources, both human and material. Its benefits go to the local community. It is linked to the concept of social justice. Pedal powered rice-threshers and Gobar gas plants are very good examples of appropriate technology.

   Appropriate technology is that technology which is affordable within the resources available, is culturally acceptable and is environmentally harmless.

5. **Artificial Intelligence** (May/June 2005)

   It is the study of how to make computer do intelligent things that we think and make decisions.

6. **Blue tooth technology** (May/June 2005)

   Blue tooth technology allows electronic equipment to communicate by using radio,so that, a computer and printer can work together without having a wire connecting them.

7. **Communication cord** (May 2002)

   A cord that passes along the length of a train inside the coaches, which the passengers can pull to stop the train in case of emergency.

8. **Communication satellite**

   It is a satellite that transmits to a place or places on Earth, telephone messages or radio and television signals received from another part of the earth.

9. **Computer**

   An electronic device for storing and analysing information fed into it, for calculating or for controlling machinery automatically.

10. **Hardware (Computing)**

    The mechanical and electronic parts of a computer.

11. **High technology** (May 2002, April/May 2005)
Unlike simple technology, high technology is not labour intensive. Machines of the sophisticated and complex types do most of the work. Naturally, these machines and their operation cost a great deal. Of course this high technology operating on a large scale is highly productive. Oil mills, ceramic plants, shoe factories and textile mills are examples of high technology.

12. **Information technology**
The study or use of electronic equipment, especially computers, for storing analysing and distributing information of all kinds, including words, numbers and pictures.

13. **Intercom** (May 2002)
A system of communication by radio or telephone between or within offices, aircraft, etc.

14. **Intermediate technology**
As the name implies, this type of technology stands halfway between simple and high technologies in terms of its capital costs, sophistication and scale of operation. The ox-drawn plough can be cited as a good example of intermediate technology as it stands between the traditional hand-operated hoe and the modern diesel tractor.

15. **Internet**
An international computer network through which computer users all over the world can communicate, exchange information, etc.

16. **Jet engine**
An engine that gives forward movement by releasing a stream of gases at high speed behind it.

17. **Jet lag**
The tired feeling and other physical effects experienced after a long flight, especially when there is a great difference in the local times at which the journey begins and ends.

18. **Laser printer**
A machine linked to a computer that produces good quality printed material by means of a laser beam.

19. **Laser technology** (Apr./May 2005)
This technology uses laser, a device that produces a narrow, intense and highly controlled beam of light.

20. **Machine**
An apparatus with several moving parts, designed to perform a particular task. Machines may be driven by electricity, steam, gas, etc. or by human power.

21. **Mass communication (the Mass media)**
It is the means of communicating with an large number of people, e.g. newspaper, television and radio.

22. **Modem**
A device linking a computer system, for example, a telephone line so that data can be transmitted at high speed from one computer to another.

23. **Multimedia**
The term means involving several different methods of communication or forms of expression. e.g. a multimedia event, including music, video and a laser show.

24. **Nuclear energy (**also **Nuclear power)**
An extremely powerful form of energy produced by the splitting of the nuclei of atoms. Nuclear energy can be used to produce electricity.

25. **Photocopier**
A machine used for making photocopies.
26. **Safety belt** (also **Seat belt**) (May 2002)
A belt attached to a seat in an aircraft, a car, etc., worn by a passenger to avoid being forward if an accident occurs.
27. **Safety match**
A match that will only catch fire when rubbed against a special surface, e.g. the side of the box containing it.
28. **Safety net**
(i) A net placed underneath acrobats, etc. to catch them if they should fall.
(ii) An arrangement that helps to prevent disaster if something goes wrong.
29. **Safety pin**
A pin with the point bent back towards the head and covered by a guard when closed.
30. **Safety valve** (May 2002)
(i) A device that releases steam or pressure in a machine when it becomes too high.
(ii) A harmless way or releasing feelings of anger, annoyance, etc.
31. **Satellite**
(i) An electronic device that is sent into space and moves around a planet.
(ii) A natural body in space that moves around a larger body, especially a planet.
32. **Semi-Conductor**
A semi-conductoris a substance such as silicon, that allows some electric currents to pass through it, and is used in electronic equipment.
33. **Simple technology or Traditional technology** (May 2002, Apr./May 2005)
This type of technology is primarily based on human labour. It involves the use of very few tools which are of the simplest variety. They cost next to nothing and are easy to operate. The use of a hoe for cultivation or weeding by a farmer is an example of simple technology.
34. **Software (Computing)**
The data, programmes, etc. used to operate a computer.
35. **Windmill**
(i) A mill that works due to the action of wind on long projecting arms (sails) that turn on a central shaft.
(ii) A similar tall thin structure used to convert the power of the wind to electricity.

Do it Yourself

Give the definitions for the following.

1. Airconditioner (Apr. '97)
2. Airport (Apr. '97)
3. Alloy (Nov. '98)
4. Ammeter (Oct. '98, Apr. 2001)
5. Audio-cassette tape (Nov. '95)
6. Auditorium (Nov./Dec. 2002)
7. Autorickshaw (Nov. '97)

8.	Barometer	(Apr. '96, Nov. '99)
9.	Biogas plant	(Oct. '96)
10.	Calculator	(Nov. '94, Nov. '96, Apr. '97, Apr. '99, Apr./May 2003, Apr./May 04)
11.	Catalyst	(Apr. '97)
12.	Chip	(Apr. 2000)
13.	Circle	(Oct. '98)
14.	Code	(Apr. '94)
15.	Computer	(M.Q.P., Apr. '95, Apr. '96, Oct. '96, Apr. '97, Nov. '98, Oct. 2000)
16.	Computer programme	(Nov. '94, Nov. '96, Nov./Dec. 2002, Jan. 2005)
17.	Computer virus	(May 2003)
18.	Dam	(Oct. '98)
19.	A domestic pump	(Apr. '96)
20.	A dual purpose bicycle	(Apr. '96)
21.	An electric fuse	(Apr. '97)
22.	A fan	(Nov. '98)
23.	A flow chart	(Apr. '96, Apr. '98, Nov/Dec. 2003)
24.	Gobar gas plant	(Nov. '95, Nov. '97)
25.	Helicopter	(Oct. '98)
26.	Immersion water heater	(Nov. '96)
27.	Laboratory	(Apr. '95, Apr. '97)
28.	Microprocessor	(Apr. '94, Apr. '98)
29.	Microphone	(Apr./May 2004)
30.	Microscope	(Apr. '99)
31.	Moon	(Apr. '98)
32.	Multinational company	(Nov. '95)
33.	Nuclear reactor	(Apr. '96)
34.	Petrol	(Nov. '96, Apr. '97, Oct. '97, Oct. 2000)
35.	Petroleum	(Apr. '95, Apr. '97)
36.	Program	(Apr. '98)
37.	Pressure cooker	(Apr. '97)
38.	Radiator	(Apr. '96, Oct. 2000)
39.	Rheostat	(Nov. '96, Oct. '97)
40.	Robot	(Nov. '94, Apr. '96, Oct. '96, Apr. '98, Nov./Dec. 2002, Jan. 2005)
41.	Scooter	(Nov. '96, Apr. '97, Oct. '97)
42.	Screw driver	(Apr. '98)
43.	Sensor	(Nov. '94, Nov./Dec. 2003)
44.	Spanner	(Apr. '94, Apr. '97)
45.	Solar cooker	(Apr. '96)
46.	Solar water heater	(Oct. '96)
47.	Telephone	(M.Q.P., Apr. '96, Apr. '97, Nov. '97, Nov. '99)
48.	Television set	(Nov. '96, Apr. '97, Apr. '98)
49.	Thermometer	(Apr. '94, Apr. '96, Nov. '98)
50.	Thermostat	(Apr. '96, Apr. '97)

51. Tour (M.Q.P.)
52. Triangle (Apr. ’94, Apr. ’96, Nov. ’96, Apr. ’97, Oct. ’97, Oct. 2000)
53. T-square (Apr. ’97)
54. Typewriter (Apr. ’95, Nov. ’96)
55. Underdeveloped country (Nov. ’95)
56. Watch (M.Q.P., Apr. ’96)
57. Water heater (Apr. ’96)
58. Windmill (Apr. ’97)
59. Workshop (Nov. ’96, Apr. ’97)

PART II

Speaking

CHAPTER

19

Verbal and Non-verbal Communication

Verbal Communication is concerned with words. It is not a synonym for oral or spoken communication. Thus, sign languages and writing are generally understood as forms of verbal communication, as both make use of words.

Non-verbal communication (NVC) is usually understood as the process of communication through sending and receiving wordless messages. Such messages can be communicated through gesture, body language or posture; facial expression and eye contact; object communication such as clothing, hairstyles or even architecture; symbols and info graphics ; prosodic features of speech such as intonation and stress and other paralinguistic features of speech such as voice quality, emotion and speaking style.

Non-verbal communication can occur through any sensory channel — sight, sound, smell, touch or taste.

The most common form of object communication is clothing. The types of clothing that people wear are often used to determine their personality, though this is considered a form of stereotyping. For example, it is common for people to give preference to those they consider attractive. A physically attractive person may be more likely to be hired for a job or to be helped than someone less attractive. A good example of clothing as object communication is the uniform.

Haptics

Haptics is the study of touching as non-verbal communication. Touches that can be defined as communication include: Handshakes, holding hands, back slap, shoulder pat, brushing arm, etc. Each of these gives off non-verbal messages as to the touching person's intentions/feelings. They also cause feelings in the receiver, whether positive or negative.

Chronemics

Chronemics is the study of the use of time in non-verbal communication. The way we perceive time, structure our time and react to time is a powerful communication tool, and helps set the stage for communication. Across cultures, time perception has played a large role in the non-verbal communication process. Time perceptions include punctuality, willingness to wait, and interactions. The use of time affects lifestyles, daily agendas, speed of speech and movements and how long people are willing to listen.

Studies have found that people use their eyes to indicate their interest. This can be done through eye contact. For example, when a professor is giving a lecture, a student may communicate disinterest by reading a magazine instead of looking at the professor's presentation.

Some major areas of non-verbal behaviours are:

- Eye contact
- Facial expressions
- Gestures
- Posture and body orientation
- Proximity
- Paralinguistics
- Humour

Eye contact

Eye contact, an important channel of interpersonal communication, helps regulate the flow of communication. It signals interest in others. Furthermore, eye contact with audiences increases the speaker's credibility. Teachers who make eye contact open the flow of communication and convey interest, concern, warmth and credibility.

Facial expressions

Smiling is a powerful cue that transmits:

- Happiness
- Friendliness
- Warmth
- Liking
- Affiliation

Thus, if you smile frequently you will be perceived as more likable, friendly, warm and approachable. Smiling is often contagious and students will react favourably and learn more.

Gestures

If you fail to gesture while speaking, you may be perceived as boring, stiff and unanimated. A lively and animated teaching style captures students' attention, makes the material more interesting, facilitates learning and provides a bit of entertainment. Head nods, a form of gestures, communicate positive reinforcement to students and indicate that you are listening.

Posture and body orientation

You communicate numerous messages by the way you walk, talk, stand and sit. Standing erect, but not rigid, and leaning slightly forward communicates to students that you are approachable, receptive and friendly. Furthermore, interpersonal closeness results when you and your students face each other. Speaking with your back turned or looking at the floor or ceiling should be avoided; it communicates disinterest to your class.

Proximity

Cultural norms dictate a comfortable distance for interaction with students. You should look for signals of discomfort caused by invading students' space. Some of these are:

- Rocking
- Leg swinging
- Tapping
- Gaze aversion

Typically, in large college classes space invasion is not a problem. In fact, there is usually too much distance. To counteract this, move around the classroom to increase interaction with your students. Increasing proximity enables you to make better eye contact and increases the opportunities for students to speak.

Paralinguistics

This facet of non-verbal communication includes such vocal elements as:

- Tone
- Pitch
- Rhythm
- Timbre
- Loudness
- Inflection

For maximum teaching effectiveness, learn to vary these six elements of your voice. One of the major criticisms is of instructors who speak in a monotone. Listeners perceive these instructors as boring and dull. Students report that they learn less and lose interest more quickly when listening to teachers who have not learned to modulate their voices.

Humour

Humour is often overlooked as a teaching tool, and it is too often not encouraged in college classrooms. Laughter releases stress and tension for both instructor and student. You should develop the ability to laugh at yourself and encourage students to do the same. It fosters a friendly classroom environment that facilitates learning.

CHAPTER

20 Speech Sounds

Phonetic Symbols

1 'i ' as in :

i)	bit	(bit)	xi)	ill	(il)
ii)	sit	(sit)	xii)	till	(til)
iii)	lip	(lip)	xiii)	pill	(pil)
iv)	is	(iz)	xiv)	hit	(hit)
v)	big	(big)	xv)	did	(did)
vi)	kiss	(kis)	xvi)	pick	(pik)
vii)	kit	(kit)	xvii)	lit	(lit)
viii)	pit	(pit)	xviii)	hid	(hid)
ix)	knit	(nit)	xix)	his	(hiz)
x)	city	(siti)	xx)	hiss	(his)

2 'i:' as in :

i)	leap	(li:p)	xi)	bleed	(bli:d)
ii)	greed	(gri:d)	xii)	meat	(mi:t)
iii)	breed	(bri:d)	xiii)	meet	(mi:t)
iv)	priest	(pri:st)	xiv)	lead	(li:d)
v)	read	(ri:d)	xv)	bead	(bi:d)
vi)	easy	(i:zi)	xvi)	neat	(ni:t)
vii)	ease	(i:z)	xvii)	peak	(pi:k)
viii)	east	(i:st)	xviii)	seek	(si:k)
ix)	believe	(bi'li:v)	xix)	sea	(si:)
x)	belief	(bi'li:f)	xx)	see	(si:)

/i:/ contrasted with /i/

i)	meal	(mi:l)	xi)	mill	(mil)
ii)	teak	(ti:k)	xii)	tick	(tik)
iii)	deed	(di:d)	xiii)	did	(did)
iv)	seek	(si:k)	xiv)	sick	(sik)
v)	ease	(i:z)	xv)	is	(iz)
vi)	peal	(pi:l)	xvi)	pill	(pil)
vii)	peak	(pi:k)	xvii)	pick	(pik)
viii)	neat	(ni:t)	xviii)	knit	(nit)

ix)	lead	(li:d)	xix)	lid	(lid)
x)	reap	(ri:p)	xx)	rip	(rip)

3. 'U ' as in

i)	book	(b**U**k)	ix)	could	(k**U**d)
ii)	good	(g**U**d)	'x)	wolf	(w**U**lf)
iii)	put	(p**U**t)	xi)	cook	(k**U**k)
iv)	nook	(n**U**k)	xii)	look	(l**U**k)
v)	full	(f**U**l)	xiii)	pull	(p**U**l)
vi)	stood	(st**U**d)	xiv)	cookie	(k**U**ki)
vii)	wood	(w**U**d)	xv)	foot	(f**U**t)
viii)	would	(w**U**d)	xvi)	fulfil	(f**U**lfil)

4. 'U:' as in

i)	soon	(s**U**:n)	viii)	pool	(p**U**:l)
ii)	boon	(b**U**:n)	ix)	blue	(bl**U**:)
iii)	fool	(f**U**:l)	x)	moon	(m**U**:n)
iv)	food	(f**U**:d)	xi)	mood	(m**U**:d)
v)	group	(gr**U**:p)	xii)	moody	(m**U**:di)
vi)	loose	(l**U**:s)	xiii)	room	(r**U**:m)
vii)	lose	(l**U**:z)	xiv)	broom	(br**U**:m)

5. 'a:' as in

i)	hard	(ha:d)	xiii)	fast	(fa:st)
ii)	heart	(ha:t)	xiv)	cast	(ka:st)
iii)	cart	(ka:t)	xv)	dark	(da:k)
iv)	car	(ka:*)	xvi)	art	(a:t)
v)	mart	(ma:t)	xvii)	graph	(gra:f)
vi)	guard	(ga:d)	xviii)	bar	(ba:*)
vii)	dart	(da:t)	xix)	clerk	(kla:k)
viii)	arm	(a:m)	xx)	half	(ha:f)
ix)	bard	(ba:d)	xxi)	castle	(ka:sl)
x)	park	(pa:k)	xxii)	caste	(ka:st)
xi)	lark	(la:k)	xxiii)	graft	(gra:ft)
xii)	last	(la:st)	xxiv)	grass	(gra:s)

6. 'e' as in

i)	men	(men)	xiii)	get	(get)
ii)	den	(den)	xiv)	fed	(fed)
iii)	pen	(pen)	xv)	send	(send)
iv)	ken	(ken)	xvi)	hen	(hen)
v)	lend	(lend)	xvii)	pet	(pet)

vi)	bend	(bend)
vii)	sent	(sent)
viii)	scent	(sent)
ix)	set	(set)
x)	let	(let)
xi)	best	(best)
xii)	spell	(spel)
xviii)	end	(end)
xix)	sell	(sel)
xx)	bell	(bel)
xxi)	mend	(mend)
xxii)	net	(net)
xxiii)	pencil	(pensil)
xxiv)	cell	(sel)

7. 'ei' as in

i)	day	(dei)
ii)	take	(teik)
iii)	make	(meik)
iv)	late	(leit)
v)	rate	(reit)
vi)	hate	(heit)
vii)	state	(steit)
viii)	plate	(pleit)
ix)	may	(mei)
x)	play	(plei)
xi)	gate	(geit)
xii)	raid	(reid)
xiii)	great	(greit)
xiv)	train	(trein)
xv)	table	(teibl)
xvi)	taste	(teist)
xvii)	gain	(gein)
xviii)	name	(neim)
xix)	break	(breik)
xx)	brake	(breik)
xxi)	grateful	(greitful)
xxii)	wake	(weik)
xxiii)	pay	(pei)
xxiv)	wait	(weit)
xxv)	tail	(teil)
xxvi)	tale	(teil)
xxvii)	mate	(meit)
xxviii)	male	(meil)
xxix)	mail	(meil)
xxx)	maid	(meid)

8. '⊃' as in

i)	clock	(kl⊃k)
ii)	solid	(s⊃lid)
iii)	got	(g⊃t)
iv)	hot	(h⊃t)
v)	pot	(p⊃t)
vi)	lot	(l⊃t)
vii)	not	(n⊃t)
viii)	knot	(n⊃t)
ix)	box	(b⊃ks)
x)	lost	(l⊃st)
xi)	on	(⊃n)
xii)	bomb	(b⊃m)
xiii)	cot	(k⊃t)
xiv)	stock	(st⊃k)
xv)	spot	(sp⊃t)
xvi)	dot	(d⊃t)

9. 'ai' as in

i)	I	(ai)
ii)	eye	(ai)
iii)	eyes	(aiz)
iv)	ice	(ais)
v)	like	(laik)
vi)	night	(nait)
xv)	fry	(frai)
xvi)	might	(mait)
xvii)	white	(wait)
xviii)	cry	(krai)
xix)	guide	(gaid)
xx)	rhyme	(raim)

vii)	knight	(nait)
viii)	fight	(fait)
ix)	bite	(bait)
x)	kite	(kait)
xi)	high	(hai)
xii)	height	(hait)
xiii)	ride	(raid)
xiv)	light	(lait)
xxi)	buy	(bai)
xxii)	Bible	('baibl)
xxiii)	bye	(bai)
xxiv)	vice	(vais)
xxv)	wise	(waiz)
xxvi)	isle	(ail)
xxvii)	file	(fail)

10. '∂u' as in

i)	go	(g∂u)
ii)	no	(n∂u)
iii)	know	(n∂u)
iv)	so	(s∂u)
v)	own	(∂un)
vi)	rose	(r∂uz)
vii)	toe	(t∂u)
viii)	low	(l∂u)
ix)	road	(r∂ud)
x)	cold	(k∂uld)
xi)	tone	(t∂un)
xii)	bow	(b∂u)
xiii)	photo	('f∂ut∂u)
xiv)	snow	(sn∂u)
xv)	remote	(ri'm∂ut)
xvi)	most	(m∂ust)
xvii)	mostly	(m∂ustli)
xviii)	only	('∂unli)
xix)	wholesale	('h∂ulseil)
xx)	wrote	(r∂ut)
xxi)	coat	(k∂ut)
xxii)	hope	(h∂up)
xxiii)	note	(n∂ut)
xxiv)	flow	(fl∂u)

11. 'au' as in

i)	how	(hau)
ii)	now	(nau)
iii)	cow	(kau)
iv)	out	(aut)
v)	plough	(plau)
vi)	drought	(draut)
vii)	mouse	(maus)
viii)	loud	(laud)
ix)	doubt	(daut)
x)	foul	(faul)
xi)	scout	(skaut)
xii)	crowd	(kraud)
xiii)	rout	(raut)
xiv)	brown	(braun)
xv)	fowl	(faul)
xvi)	sound	(saund)
xvii)	house	(haus)
xviii)	hound	(haund)

Notes

i) drought : (a period of) continuous dry weather, especially when there is not enough water for people's needs.

ii) rout : a total defeat.

iii) hound : a dog used for hunting.

iv) foul : (a) very unpleasant ; very bad ; terrible.
(b) an act or a piece of play that is against the rules of a game.

v) fowl : a chicken.

12. 'æ' as in

i)	cat	(kæt)	xi)	knack	(næk)
ii)	rat	(ræt)	xii)	tap	(tæp)
iii)	hat	(hæt)	xiii)	bag	(bæg)
iv)	bat	(bæt)	xiv)	lap	(læp)
v)	sat	(sæt)	xv)	add	(æd)
vi)	fat	(fæt)	xvi)	man	(mæn)
vii)	have	(hæv)	xvii)	satisfy	(sætis'fai)
viii)	gap	(gæp)	xviii)	back	(bæk)
ix)	tag	(tæg)	xix)	pat	(pæt)
x)	sack	(sæk)	xx)	mat	(mæt)

13. '3:' as in

i)	curse	(k3:s)	vii)	girl	(g3:l)
ii)	nurse	(n3:s)	viii)	first	(f3:st)
iii)	bird	(b3:d)	ix)	early	(3:li)
iv)	heard	(h3:d)	x)	curt	(k3:t)
v)	hurt	(h3:t)	xi)	curd	(k3:d)
vi)	dirt	(d3:t)	xii)	hurl	(h3:l)

14. '⊃:' as in

i)	ball	(b⊃:l)	viii)	door	(d⊃:*)
ii)	all	(⊃:l)	ix)	sore	(s⊃:*)
iii)	caught	(k⊃:t)	x)	fort	(f⊃:t)
iv)	bought	(b⊃:t)	xi)	cornfield	(k⊃:nfi:ld)
v)	call	(k⊃:l)	xii)	fortnight	('f⊃:tnait)
vi)	court	(k⊃:t)	xiii)	born	(b⊃:n)
vii)	port	(p⊃:t)	xiv)	dawn	(d⊃:n)

15. 'Λ' as in

i)	cup	(kΛp)	xii)	front	(frΛnt)
ii)	sun	(sΛn)	xiii)	Monday	('mΛndei)
iii)	son	(sΛn)	xiv)	bun	(bΛn)
iv)	lump	(lΛmp)	xv)	hurry	(hΛri)
v)	bust	(bΛst)	xvi)	bud	(bΛd)
vi)	tough	(tΛf)	xvii)	fun	(fΛn)
vii)	blood	(blΛd)	xviii)	cut	(kΛt)
viii)	does	(dΛz)	xix)	hut	(hΛt)
ix)	done	(dΛn)	xx)	Sunday	(sΛndei)
x)	dull	(dΛl)	xxi)	love	(lΛv)
xi)	pulse	(pΛls)	xxii)	lovely	(lΛvli)

16. 'ə' as in

i)	again	(ə 'gen)	viii)	against	(ə 'genst, ə 'geinst)
ii)	colour	('kʌlə*)	ix)	gutter	('gʌtə*)
iii)	about	(ə 'baut)	x)	and	(ænd, ənd)
iv)	adopt	(ə 'dɔpt)	xi)	applaud	(ə 'plɔ:d)
v)	water	('wɔ:tə*)	xii)	apparatus	(æpə 'reitəs)
vi)	butter	('bʌtə*)	xiii)	apparent	(ə 'pærənt)
vii)	attack	(ə 'tæk)	xiv)	ago	(ə 'gəu)

17. 'iə' as in

i)	hear	(hiə*)	viii)	tier	(tiə*)
ii)	here	(hiə*)	ix)	real	(riəl)
iii)	dear	(diə*)	x)	beard	(biəd*)
iv)	deer	(diə*)	xi)	ear	('iə*)
v)	clear	(kliə*)	xii)	mere	(miə*)
vi)	near	(niə*)	xiii)	beer	(biə*)
vii)	fear	(fiə*)	xiv)	steer	(stiə*)

18. 'uə' as in

i)	poor	(puə*)	v)	confluence	('kɔnfluəns)
ii)	tour	(tuə*)	vi)	fluent	(fluənt)
iii)	doer	(duə*)	vii)	affluent	(æ'fluənt)
iv)	tourist	(tuərist)	viii)	influence	('influəns)

19. 'ɔi' as in

i)	boy	(bɔ**i**)	ix)	poise	(pɔ**i**z)
ii)	toy	(tɔ**i**)	x)	coil	(kɔ**i**l)
iii)	toil	(tɔ**i**l)	xi)	hoist	(hɔ**i**st)
iv)	voice	(vɔ**i**s)	xii)	coy	(kɔ**i**)
v)	point	(pɔ**i**nt)	xiii)	noise	(nɔ**i**z)
vi)	oil	(ɔ**i**l)	xiv)	ointment	('ɔ**i**ntmənt)
vii)	boil	(bɔ**i**l)	xv)	poison	(pɔ**i**zn)
viii)	soil	(sɔ**i**l)	xvi)	alloy	(ə 'lɔi)

20. 'ɛə' or 'eə' as in

i)	pair	(pɛə*)	viii)	bare	(bɛə*)
ii)	hare	(hɛə*)	ix)	bear	(bɛə*)
iii)	hair	(hɛə*)	x)	rare	(rɛə*)
iv)	dare	(dɛə*)	xi)	fair	(fɛə*)
v)	air	(ɛə*)	xii)	fare	(fɛə*)
vi)	mare	(mɛə*)	xiii)	stare	(stɛə*)
vii)	care	(kɛə*)	xiv)	player	(plɛə*)

21. 'tʃ' as in

i)	church	(tʃ∂:tʃ)	xi)	choice	(tʃ⊃is)
ii)	chest	(tʃest)	xii)	watch	(w⊃tʃ)
iii)	cheer	(tʃ∂*)	xiii)	rich	(ritʃ)
iv)	choose	(tʃu:z)	xiv)	beach	(bi:tʃ)
v)	chat	(tʃæt)	xv)	teach	(ti:tʃ)
vi)	chit	(tʃit)	xvi)	teacher	(ti:tʃ∂*)
vii)	chip	(tʃip)	xvii)	furniture	('fə:nitʃ∂*)
viii)	chop	(tʃ⊃p)	xviii)	chamber	('tʃeimb∂*)
ix)	cheat	(tʃi:t)	xix)	childhood	('tʃaildhud*)
x)	chair	(tʃe∂*)	xx)	nature	(neitʃ∂*)

22. 'd3' as in

i)	jest	(d3est)	xi)	gin	(d3in)
ii)	urge	(∂:d3)	xii)	jail	(d3eil)
iii)	cage	(keid3)	xiii)	jam	(d3æm)
iv)	page	(peid3)	xiv)	urgent	('∂:d3∂nt)
v)	change	(tʃeind3)	xv)	adjust	(∂'d3Λst)
vi)	budget	('bΛd3it)	xvi)	engine	('end3in)
vii)	judge	(d3Λd3)	xvii)	June	('d3u:n)
viii)	rage	(reid3)	xviii)	danger	(deind3∂*)
xi)	jar	(d3a:*)	xix)	ginger	(gind3∂*)
x)	joke	(d3∂uk)			

23. 'ʃ' as in

i)	ship	(ʃip)	xi)	sheet	(ʃi:t)
ii)	sheep	(ʃi:p)	xii)	shriek	(ʃri:k)
iii)	crash	(kræʃ)	xiii)	fish	(fiʃ)
iv)	shoe	(ʃu:)	xiv)	push	(puʃ)
v)	shall	(ʃ∂l)	xv)	machine	(m∂'ʃi:n)
vi)	shirt	(ʃ3:t)	xvi)	nation	(neiʃn)
vii)	shut	(ʃΛt)	xvii)	assure	(∂ 'ʃu∂*)
viii)	she	(ʃi:)	xviii)	admission	(∂ d 'miʃn)
ix)	short	(ʃ⊃:t)	xix)	mushroom	('m ΛʃrΛm)
x)	shot	(ʃ⊃t)	xx)	Chicago	(ʃi 'ka:g∂u)

24. 'θ' as in

i)	thick	(θik)	xi)	wealth	(welθ)
ii)	wrath	(ra: θ)	xii)	thrift	(θrift)
iii)	bath	(ba: θ)	xiii)	thin	(θin)
iv)	month	(mΛnθ)	xiv)	thrice	(θrais)
v)	mouth	(mauθ)	xv)	throat	(θr∂ut)

vi)	south	(sauθ)	xvi)	thrill	(θril)
vii)	health	(helθ)	xvii)	throne	(θr∂un)
viii)	thrash	(θræʃ)	xviii)	throw	(θr∂u)
ix)	three	(θri:)	xix)	thumb	(θΛm)
x)	through	(θru:)	xx)	threat	(θret)

25. 'ð' as in

i)	the	(ði:, ð∂)	xiv)	those	(ð∂uz)
ii)	that	(ðæt, ð∂t)	xv)	brother	(brΛ ð∂*)
iii)	there	(ðe∂*)	xvi)	father	(fa: ð∂*)
iv)	their	(ðe∂*)	xvii)	weather	(weð∂*)
v)	this	(ðis)	xviii)	whether	(weð∂*)
vi)	these	(ði:z)	xix)	feather	(feð∂*)
vii)	them	(ðem)	xx)	either	(aið∂*,i: ð∂*)
viii)	they	(ðei)	xxi)	rather	(ra: ð∂*)
ix)	with	(wið)	xxii)	other	(Að∂*)
x)	clothe	(kl∂uð)	xxiii)	worthy	(w∂:ði)
xi)	breathe	(bri:ð)	xxiv)	leather	(leð∂*)
xii)	though	(ð∂u)	xxv)	lather	(la:ð∂*)
xiii)	thus	(ðΛs)	xxvi)	southern	(sΛð∂n)

26. 'j' as in

i)	yes	(jes)	xi)	year	(ji∂*)
ii)	yet	(jet)	xii)	used	(ju:st)
iii)	yesterday	('jest∂dei)	xiii)	abuse	(∂ 'bju:s)
iv)	you	(ju:)	xiv)	familiar	(f∂ 'mili∂*)
v)	use	(ju:s)	xv)	unit	(ju:nit)
vi)	yarn	(ja:n)	xvi)	union	('ju:nj∂ n)
vii)	yoga	(j∂ug∂)	xvii)	student	('stju:dnt)
viii)	fuse	(fju:z)	xviii)	yellow	('jel ∂ u)
ix)	tube	(tju:b)	xix)	yield	(ji:ld)
x)	tune	(tju:n)	xx)	beauty	('bju:ti)

27. '3' as in

i)	casual	('kæ3u∂l)	ix)	division	(di'vi3n)
ii)	usual	('ju:3w∂l)	x)	decision	(di'si3n)
iii)	pleasure	('ple3∂*)	xi)	vision	(vi3n)
iv)	treasure	('tre3∂*)	xii)	occasion	(∂ 'kei3n)
v)	measure	('me3∂*)	xiii)	explosion	(ik'spl∂u3n,ek's)
vi)	garage	('gæra:d3,'gæra:3)	xiv)	transition	(trænsi3n)
vii)	leisure	(le3∂*)	xv)	enclosure	(in'kl∂ u 3∂*)
viii)	confusion	(k∂nfju:3n)	xvi)	massage	('mæsa:3)

28. 'ŋ' as in

i)	king	(kiŋ)	xi)	rung	(rΛŋ)
ii)	think	(θiŋk)	xii)	sung	(sΛŋ)
iii)	sing	(siŋ)	xiii)	tongue	(tΛŋ)
iv)	thank	(θæŋk)	xiv)	long	(l⊃ŋ)
v)	bring	(briŋ)	xv)	language	('læŋgwid3)
vi)	ring	(riŋ)	xvi)	along	(∂'l⊃ŋ)
vii)	angle	(æŋgl)	xvii)	among	(∂'mΛŋ)
viii)	blank	(blæŋk)	xviii)	bang	(bæŋ)
ix)	rank	(ræŋk)	xix)	evening	('i:vniŋ)
x)	strong	(str⊃ŋ)	xx)	prolong	(pr∂'l⊃ŋ)

29. 'p' as in

i)	put	(put)	xii)	paste	(peist)
ii)	sip	(sip)	xiii)	packet	('pækit)
iii)	trap	(træp)	xiv)	pocket	('p⊃kit)
iv)	grape	(greip)	xv)	possible	('p⊃sibl)
v)	pot	(p⊃t)	xvi)	painter	('peint∂*)
vi)	palm	(pa:m)	xvii)	companion	(k∂m'pænj∂n)
vii)	pen	(pen)	xviii)	oppose	(∂'p∂uz)
viii)	pick	(pik)	xix)	pair	(pε∂*)
ix)	poor	(pu∂*)	xx)	pare	(pε∂*)
x)	gap	(gæp)	xxi)	pear	(pε∂*)
xi)	pack	(pæk)	xxii)	pull	(pul)

30. 'b' as in

i)	bat	(bæt)	xiii)	bare	(bε∂*)
ii)	rub	(rΛb)	xiv)	bear	(bε∂*)
iii)	book	(buk)	xv)	boss	(b⊃s)
iv)	robe	(r∂ub)	xvi)	butter	(bΛt∂*)
v)	best	(best)	xvii)	baby	('beibi)
vi)	tube	(tju:b)	xviii)	rubber	('rΛb∂*)
vii)	bet	(bet)	xix)	brass	(bra:s)
viii)	rib	(rib)	xx)	breakfast	('brekf∂st)
ix)	bulb	(bΛlb)	xxi)	bamboo	(bæmbu:)
x)	bye	(bai)	xxii)	booster	(bu:st∂*)
xi)	buy	(bai)	xxiii)	ribbon	('rib∂n)
xii)	business	(biznis)	xxiv)	back	(bæk)

31. 't' as in

i)	time	(taim)	xi)	tip	(tip)
ii)	test	(test)	xii)	tail	(teil)
iii)	taste	(teist)	xiii)	tale	(teil)
iv)	tool	(tu:l)	xiv)	mate	(meit)
v)	took	(tuk)	xv)	rate	(reit)
vi)	tame	(teim)	xvi)	attend	(ə 'tend)
vii)	late	(leit)	xvii)	petroleum	(pə 'trəuljəm)
viii)	plate	(pleit)	xviii)	electricity	(ilek'trisəti,siti)
ix)	gate	(geit)	xix)	telephone	('telifəun)
x)	tour	(tuə*)	xx)	tier	('tiə*)
			xxi)	type	(taip)

32. 'd' as in

i)	done	(dʌn)	xi)	donate	(dəu 'neit)
ii)	dare	(dɛə*)	xii)	daddy	('dædi)
iii)	rod	(rɔd)	xiii)	radar	('reida:*)
iv)	god	(gɔd)	xiv)	dusty	('dʌsti)
v)	dear	(diə*)	xv)	domestic	(də 'mestik)
vi)	deer	(diə*)	xvi)	dynamo	('dainəməu)
vii)	read	(ri:d)	xvii)	day	(dei)
viii)	plead	(pli:d)	xviii)	ladder	('lædə*)
ix)	dust	(dʌst)	xix)	den	(den)
x)	made	(meid)	xx)	doll	(dɔl)

33. 'K' as in

i)	king	(kiŋ)	xi)	caste	(ka:st)
ii)	block	(blɔk)	xii)	cast	(ka:st)
iii)	look	(luk)	xiii)	cost	(kɔst)
iv)	cat	(kæt)	xiv)	come	(kʌm)
v)	cut	(kʌt)	xv)	cool	(ku:l)
vi)	crown	(kraun)	xvi)	kit	(kit)
vii)	scholar	('skɔlə*)	xvii)	occur	(ə 'k3:)
viii)	kicked	(kikt)	xviii)	kitchen	('kitʃin)
ix)	picked	(pikt)	xix)	acquire	(ə 'kwaiə*)
x)	duck	(dʌk)	xx)	crawl	(krɔl)

34. 'g' as in

i)	go	(gəu)	xi)	magazine	(mægə 'zi:n)
ii)	get	(get)	xii)	examination	(igzæmi'neiʃn)
iii)	egg	(eg)	xiii)	ego	('i:gəu)
iv)	bag	(bæg)	xiv)	glamour	('glæmə*)

v)	gate	(geit)	xv)	grand	(grænd)
vi)	goal	(g∂ul)	xvi)	grant	(gra:nt)
vii)	flag	(flæg)	xvii)	grass	(gra:s)
viii)	league	(li:g)	xviii)	greed	(gri:d)
ix)	tongue	(tΛη)	xix)	glycerine	(‘glis∂ri:n)
x)	goat	(g∂ut)	xx)	geography	(d3i ‘⊃gr∂fi)

35. ‘m’ as in

i)	man	(mæn)	xi)	tomb	(tu:m)
ii)	name	(neim)	xii)	female	(‘fi:meil)
iii)	most	(m∂ust)	xiii)	murmur	(‘m3:m∂*)
iv)	make	(meik)	xiv)	mother	(‘mΛð∂*)
v)	mail	(meil)	xv)	smell	(smel)
vi)	male	(meil)	xvi)	ma’am	(mæm)
vii)	mare	(mε∂*)	xvii)	mass	(mæs)
viii)	bomb	(b⊃m)	xviii)	malnutrition	(mælnju:’triʃn)
ix)	comb	(k∂um)	xix)	majority	(m∂’d3⊃r∂ti)
x)	climb	(klaim)			

36. ‘n’ as in

i)	no	(n∂u)	xi)	nail	(neil)
ii)	know	(n∂u)	xii)	boon	(bu:n)
iii)	knowledge	(‘n⊃lid**3**)	xiii)	snag	(snæg)
iv)	not	(n⊃t)	xiv)	nation	(‘neiʃn)
v)	name	(neim)	xv)	nationality	(næʃ∂’næl∂ti)
vi)	nest	(nest)	xvi)	neuter	(nju:t∂*)
vii)	noon	(nu:n)	xvii)	needs	(ni:dz)
viii)	knock	(n⊃k)	xviii)	net-work	(‘netw∂:k)
ix)	knot	(n⊃t)	xix)	noble	(‘n∂ubl)
x)	lane	(lein)	xx)	Nobel	(n∂u’bel)

37. ‘l’ as in

i)	light	(lait)	xi)	silk	(silk)
ii)	list	(list)	xii)	sick	(sik)
iii)	bull	(bul)	xiii)	seek	(si:k)
iv)	bulb	(bΛlb)	xiv)	wealth	(welθ)
v)	call	(k⊃l)	xv)	real	(ri∂l)
vi)	apple	(‘æpl)	xvi)	pile	(pail)
vii)	camel	(kæml)	xvii)	parcel	(pa:sl)
viii)	little	(‘litl)	xviii)	live(v)	(liv)
ix)	help	(help)	xix)	live (adj.)	(laiv)
x)	milk	(milk)	xx)	loot	(lu:t)

38. 'f' as in

i)	fat	(fæt)	xi)	father	('fa:ðə*)
ii)	rough	(rʌf)	xii)	gramophone	('græmə*fəun)
iii)	tough	(tʌf)	xiii)	physician	(fi'ziʃn)
iv)	buffet	('bufei)	xiv)	famous	('feimə*s)
v)	feast	(fi:st)	xv)	fascination	(fæsi'neiʃn)
vi)	puff	(pʌf)	xvi)	photograph	('fəutəgra:f)
vii)	first	(fə*:st)	xvii)	fair	(fɛə*)
viii)	fell	(fel)	xviii)	fare	(fɛə*)
ix)	fill	(fil)	xix)	food	(fu:d)
x)	lieutenant	(lef'tenənt)	xx)	fit	(fit)

39. 'v' as in

i)	vine	(vain)	xi)	vow	(vau)
ii)	vest	(vest)	xii)	view	(vju:)
iii)	vim	(vim)	xiii)	drive	(draiv)
iv)	van	(væn)	xiv)	valve	(vælv)
v)	love	(lʌv)	xv)	vigour	(vigə*)
vi)	vain	(vein)	xvi)	voucher	('vautʃə*)
vii)	vein	(vein)	xvii)	vocal	('vəukl)
viii)	vague	(veig)	xviii)	verdict	('və*:dikt)
ix)	gave	(geiv)	xix)	verse	(v3:s)
x)	veil	(veil)	xx)	very	('veri)

40. 's' as in

i)	sit	(sit)	xii)	ass	(æs)
ii)	some	(sʌm)	xiii)	ace	(eis)
iii)	sum	(sʌm)	xiv)	semester	(si'mestə*)
iv)	sow (plant seed)	(səu)	xv)	censor	('sensə*)
v)	sow (female pig)	(sau)	xvi)	summer	('sʌmə*)
vi)	mess	(mes)	xvii)	lesson	('lesn)
vii)	cease	(si:s)	xviii)	lessen	('lesn)
viii)	seize	(si:z)	xix)	crisis	('kraisis)
ix)	mass	(mæs)	xx)	basis	('beisis)
x)	moss	(m⊃s)	xxi)	city	('siti)
xi)	sister	(sistə*)	xxii)	certain	('s3:tn)

41. 'z' as in

i)	is	(iz)	xi)	peas	(pi:z)
ii)	as	(æz)	xii)	knees	(ni:z)
iii)	buzz	(bʌz)	xiii)	houses	(hauziz)
iv)	boys	(b⊃iz)	xiv)	lazy	('leizi)

v)	toys	(tɔiz)	xv)	zoology	(zəu'ɔlədʒi)
vi)	rose	(rəuz)	xvi)	zed	(zed)
vii)	please	(pli:z)	xvii)	gaze	(geiz)
viii)	zoo	(zu:)	xviii)	zest	(zest)
ix)	zero	('ziərəu)	xix)	zinc	(ziŋk)
x)	prize	(praiz)	xx)	falls	(fɔlz)
			xxi)	zip	(zip)

42. 'r' as in

i)	rear	(riə*)	xi)	trick	(trik)
ii)	run	(rʌn)	xii)	room	(ru:m)
iii)	rest	(rest)	xiii)	radium	('reidiəm)
iv)	rub	(rʌb)	xiv)	rack	(ræk)
v)	rust	(rʌst)	xv)	racket	(rækit)
vi)	shriek	(ʃri:k)	xvi)	rocket	('rɔkit)
vii)	remember	(ri'membə*)	xvii)	receive	(ri'si:v)
viii)	arrange	(ə'reind3)	xviii)	receipt	(ri'si:t)
ix)	story	('stɔ:ri)	xix)	reappear	(ri:ə'piə*)
x)	treasure	('tre**3**ə*)	xx)	recur	(ri'kə:)

43. 'h' as in

i)	hot	(hɔt)	xi)	hotel	(həu'tel)
ii)	heat	(hi:t)	xii)	hammer	('hæmə*)
iii)	hat	(hæt)	xiii)	habitual	(hə'bitʃuəl)
iv)	haste	(heist)	xiv)	hemisphere	(hemi'sfiə*)
v)	hall	(hɔ:l)	xv)	house warming	('hauswɔ:miŋ)
vi)	hell	(hel)	xvi)	housemaid	('hausmeid)
vii)	hut	(hʌt)	xvii)	hypocrite	('hipəkrit)
viii)	his	(hiz)	xviii)	hyphen	('haifn)
ix)	hello	(hə'ləu,he'ləu)	xix)	hypothetic	(haipəu'θetik)
x)	behind	(bi'haind)	xx)	homonym	('hɔmənim)

44. 'w' as in

i)	was	(wɔz)	xi)	woman	('wumən)
ii)	were	(wə*)	xii)	women	('wimin)
iii)	waste	(weist)	xiii)	adequate	('ædikwət)
iv)	waist	(weist)	xiv)	wagon	(wægən)
v)	we	(wi:)	xv)	warning	('wɔ:niŋ)
vi)	wig	(wig)	xvi)	question	(kwestʃən)
vii)	will	(wil)	xvii)	quarrel	(kwɔrəl)
viii)	wit	(wit)	xviii)	awkward	('ɔ:kwəd)
ix)	woe	(wəu)	xix)	wine	(wain)
x)	wall	(wɔ:l)	xx)	wise	(waiz)

CHAPTER

21 Syllables

Example

Divide the following words into syllables and underline the stressed syllable. (Nov./Dec. 2003)

(a) Technology (b) Communication

Answer

(a) Technology (4) (b) Communication (5)

Additional Examples

1.	incredible	(4)	2.	atmosphere	(3)
3.	garbage	(2)	4.	disposal	(3)
5.	deluge	(2)	6.	descend	(2)
7.	damage	(2)	8.	pollution	(3)
9.	production	(3)	10.	poachers	(2)
11.	ecology	(4)	12.	vegetation	(4)
13.	afforestation	(5)	14.	expedition	(4)
15.	metallic	(3)	16.	deduce	(2)
17.	nationality	(4)	18.	sanctuary	(3)
19.	object (N)	(2)	20.	object (V)	(2)
21.	subject (N)	(2)	22.	subject (V)	(2)
23.	project (N)	(2)	24.	project (V)	(2)
25.	perfect (N)	(2)	26.	perfect (V)	(2)
27.	conduct(N)	(2)	28.	conduct(V)	(2)
29.	contact(N)	(2)	30.	contact(V)	(2)
31.	contrast(N)	(2)	32.	contrast(V)	(2)
33.	export(N)	(2)	34.	export(V)	(2)
35.	rebel(N)	(2)	36.	rebel(V)	(2)
37.	produce(N)	(2)	38.	produce(V)	(2)
39.	record(N)	(2)	40.	record(V)	(2)
41.	progress(N)	(2)	42.	progress(V)	(2)
43.	convict(N)	(2)	44.	convict(V)	(2)
45.	import(N)	(2)	46.	import(V)	(2)
47.	increase(N)	(2)	48.	increase(V)	(2)

49.	contact(N)	(2)	50.	contact(V)	(2)
51.	permit(N)	(2)	52.	permit(V)	(2)
53.	examination	(5)	54.	production	(4)
55.	fortification	(5)	56.	sanitation	(4)
57.	magnify	(3)	58.	meditate	(3)
59.	minimise	(3)	60.	analyse	(3)
61.	psychology	(4)	62.	pathology	(4)
63.	economic	(4)	64.	emphatic	(3)
65.	historical	(4)	66.	geographical	(5)
67.	botanical	(4)	68.	formality	(4)
69.	capacity	(4)	70.	gravity	(3)
71.	responsibility	(6)	72.	payee	(2)
73.	devotees	(3)	74.	nominee	(3)
75.	engineer	(3)	76.	pioneer	(2)
77.	gazette	(2)	78.	compose	(2)
79.	marriage	(2)	80.	performance	(3)
81.	beautiful	(3)	82.	motherhood	(3)
83.	cowardice	(3)	84.	conclusive	(3)
85.	colourless	(3)	86.	achievement	(3)
87.	enclosure	(3)	88.	musician	(3)
89.	politician	(4)	90.	injurious	(4)
91.	laborious	(4)	92.	however	(3)
93.	whenever	(3)	94.	myself	(2)
95.	target	(2)	96.	support	(2)
97.	commitment	(3)	98.	infrastructure	(4)
99.	proposition	(4)	100.	statutory	(4)
101.	prospect	(2)	102.	protectionism	(5)
103.	projection	(3)	104.	constraint	(2)
105.	impediment	(4)	106.	holistic	(3)
107.	believe	(2)	108.	remote	(2)
109.	satisfy	(3)	110.	fortnight	(2)
111.	Monday	(2)	112.	colour	(2)
113.	applaud	(2)	114.	apparatus	(4)
115.	apparent	(2)	116.	ago	(2)
117.	confluence	(3)	118.	affluent	(3)
119.	influence	(3)	120.	ointment	(2)
121.	furniture	(3)	122.	chamber	(2)

123.	childhood	(2)	124.	urgent	(2)
125.	adjust	(2)	126.	engine	(2)
127.	budget	(2)	128.	machine	(2)
129.	assure	(2)	130.	admission	(3)
131.	mushroom	(2)	132.	yesterday	(3)
133.	abuse	(2)	134.	familiar	(4)
135.	union	(3)	136.	student	(2)
137.	yellow	(2)	138.	telecommunication	(7)
139.	explosion	(3)	140.	language	(2)
141.	along	(2)	142.	among	(2)
143.	evening	(2)	144.	prolong	(2)
145.	possible	(3)	146.	companion	(3)
147.	breakfast	(2)	148.	ribbon	(2)
149.	magazine	(3)	150.	ego	(2)
151.	glamour	(2)	152.	kitchen	(2)
153.	scholar	(2)	154.	petroleum	(4)
155.	electricity	(5)	156.	telephone	(3)
157.	domestic	(3)	158.	dynamo	(3)
159.	glycerine	(3)	160.	malnutrition	(4)
161.	knowledge	(2)	162.	nationality	(4)
163.	network	(2)	164.	gramophone	(3)
165.	physician	(3)	166.	famous	(2)
167.	fascination	(4)	168.	photograph	(3)
169.	lieutenant	(3)	170.	verdict	(2)
171.	semester	(3)	172.	censor	(2)
173.	summer	(2)	174.	crisis	(2)
175.	zoology	(4)	176.	zero	(2)
177.	remember	(3)	178.	reappear	(3)
179.	habitual	(4)	180.	hemisphere	(3)
181.	hypothetic	(4)	182.	adequate	(3)
183.	warning	(2)	184.	awkward	(2)

CHAPTER

22

Word Stress (Structure and Content Words)

Stress is an extra force used when pronouncing a particular word or syllable.

Not all syllables, in an utterance, in English are spoken with equal emphasis. There are certain syllables which are stressed more than others. Thus in the word 'father', the first syllable/fa:/is stressed and so, it is spoken more prominently than the second syllable. Similarly, in the word 'about', the second syllable 'bout' is stressed and so, is spoken more prominently, than the first syllable.

Stress mark is a mark used to indicate the stress on a syllable in a word. For example, in the word 'sympathetic' the primary stress (') is on the third syllable and the secondary stress is on the first syllable.

Sometimes the stress factor acts as a marker for a class of words. For example, in the following words, the shift in stress changes the class.

Noun	**Verb**
'conduct	con'duct
'produce	pro'duce
'convict	con'vict
'subject	sub'ject
'object	ob'ject
'progress	pro'gress
'record	re'cord
'import	im'port
'increase	in'crease
'present	pre'sent
'contact	con'tact
'permit	per'mit

1. If a word ends in-*tion*, the syllable preceding it, is stressed.
   Examples exami'nation pro'duction
   fortifi'cation sani'tation
2. If a verb ends in *-fy*, *-ate*, *-ize, -ise* or *yse,* the main stress is on the third syllable counted from the end.
   Examples 'magnify 'meditate 'minimise 'analyse
3. If a word ends in *-logy,* the main stress is on the syllable immediately before this.
   Examples psy'chology pa'thology
4. (a) If an adjective ends in *-ic*, the main stress is normally on the second syllable counted from the end .
   Examples eco'nomic em'phatic

(b) If an adjective ends in *-ical,* the main stress is normally on the third syllable counted from the end.
Examples his'torical geo'graphical bo'tanical

5. If an adverb ends in *-ically,* the main stress is normally on the fourth syllable counted from the end.
Examples em'phatically eco'nomically
6. If a word ends in *-ity,* the main stress falls on the third syllable counted from the end, and on the second syllable counted from the end if there are only two syllables.
Examples for'mality ca'pacity 'gravity responsi'bility 'city 'pity
7. If a word ends in *-ee* or *–eer*, the main stress is normally on the last syllable.
Examples pa'yee devo'tees nomi'nee engi'neer pio'neer
8. If a word ends in *-ette*, the main stress normally falls on the last syllable.
Examples ciga'rette ga'zette
9. In words with weak prefixes, the root is stressed.
Examples a'head a'lone a'part be'low com'pose de'velop re'duce
10. The inflectional suffixes *–ed, -es* and *–ing* do not affect the stress pattern.
Examples

re'late	re'lated
sub'mit	sub'mitted
com'pose	com'poses
be'gin	be'ginning
ad'vance	ad'vancing

11. The derivational suffixes *-age, -ance, -en, -er, -ess, -ful, -hood, - ice, -ish, -ive, -less, -ly, -ment, -ness, or, -ship, -ter, -ure* and *-zen* do not normally change the stress pattern.
Examples

'marry	'marriage
per'form	per'formance
'bright	'brighter
'common	'commoner
'actor	'actress
'beauty	'beautiful
'mother	'motherhood
'coward	'cowardice
'yellow	'yellowish
con'clude	con'clusive
'colour	'colourless
'certain	'certainly
a'chieve	a'chievement
'bitter	'bitterness
'collect	'collector
'leader	'leadership
'laugh	'laughter
en'close	en'closure
'city	'citizen

12. In words ending in *-ian* or *-ious* the syllable preceding the suffix is stressed.
Examples mu'sician poli'tician in'jurious la'borious
13. In compound words ending with *-ever* and *-self*, the second element is stressed.
Examples how'ever when'ever him'self my'self

Syllables which are stressed are underlined.

I

1. renowned
2. maintenance
3. option
4. survival
5. drawback
6. estimate
7. objective
8. disease
9. contaminated
10. illness
11. disadvantage
12. calculate
13. famous
14. upkeep
15. unclean

II

1. extraction
2. collateral
3. flotation
4. default
5. stagnant
6. amalgamation
7. distress
8. cyanidation

III

1. volatile
2. stagnant
3. accumulated
4. assets
5. speculators
6. sensitive
7. abnormalities
8. hoarding
9. virtually
10. distress

IV

1. migrant
2. rural
3. statistics
4. recruit
5. import
6. genius
7. stimulus

V

1. surfaces
2. feedstock
3. exploit
4. columns
5. feasible
6. lubrication
7. conservation
8. consumption

VI

1. renewable
2. natural
3. fuel
4. population
5. facilitate
6. commercial
7. alternative
8. demand

VII

1. abundant
2. artificial
3. former
4. sophisticated
5. salination
6. simple
7. desalination
8. natural
9. latter
10. limited

VIII

1. fiction
2. fantasy
3. extraterrestrial
4. robot
5. sensor
6. natural language
7. artificial
8. intelligence
9. semiconductor
10. microprocessor

IX

1. complaint
2. provide
3. granted
4. remain
5. adhere
6. dictate
7. account

X

1. heritage
2. intact
3. panorama
4. exotic
5. repository
6. spectacular
7. tranquil
8. sanctuary
9. diversity

EXERCISE

Write the stressed syllables in the following words.

(a) proposition (b) impediment
(c) statutory (d) information (May 2002)

Word Stress

When a word has more than one syllable, one of the syllables is uttered with greater force than the others. This is called stress. Here are some examples.

(**Note**: The stressed syllables are underlined)

1. incredible
2. atmosphere
3. garbage
4. disposal
5. wire
6. deluge
7. descend
8. damage
9. pollution
10. production
11. poachers
12. ecology
13. vegetation
14. afforestation
15. metallic
16. deduce
17. nationality
18. sanctuary
19. oxidation
20. develop
21. foundation
22. temperature
23. corrosion
24. security
25. understand
26. material
27. sulphuric
28. velocity
29. magnetic
30. concrete
31. support
32. removal
33. information
34. advantageous
35. degree

Some words are stressed differently according to the various ways in which they are used.

	Noun	Verb
1.	PROject	proJECT
2.	PERfect	perFECT
3.	CONtract	conTRACT
	Noun	**Verb**
4.	CONtrast	conTRAST
5.	EXport	exPORT
6.	REbel	reBEL

Consonant Clusters

When two or three consonants occur together in a word, they form a consonant cluster. They occur at the beginning or at the end of words.

Initial consonant clusters

/pl-/	plan, plot, please	/fl-/	flask, fly, flew
/pr-/	pray, prize, proud	/ fr-/	fresh, free, fry
/tr-/	treat, train, trick	/qr-/	three, thrash, threw
/tw-/	twice, twelve, twins	/ qw-/	thwart
/kl-/	clean, club, climb	/ sp-/	speak, spice, spell
/kr-/	cry, cross, crown	/st-/	station, stick
/kw-/	quiet, quite, queen	/sk-/	sky, school, ski
/bl-/	block, blue, blade	/sm-/	small, smear, smoke
/br-/	brick, bright, brew	/sn-/	snack, snare, slate
/dr-/	draw, drink, dress	/ sw-/	sweep, sway, suite
/dw-/	dwarf, dwell, dwindle	/òr-/	shrink, shrewd, shriek
/gl-/	glass, gleam, glue	/gr-/	green, ground, grass
/spl-/	splash, spleen, split	/skr-/	screen, scream, scratch
/spr-/	spring, spright, spray	/skw-/	squash, square, squint
/str-/	strain, strike, straight		

Final consonant clusters

/-pt/	stopped, helped, kept	/-bd/	robbed, clubbed
/-pq/	depth	/-dq/	breadth
/- tq/	eighth	/-gd/	mugged, begged
/-ts/	cuts, mats, cheats	/-tòt/	watched, reached
/-kt/	worked, talked, act	/-d_3d/	judged, abridged
/-ks/	walks, books, box	/-gd/	banged, hanged
/-hq/	length, strength	/-ft/	laughed, soft
/-lp/	help, scalp	/-fq/	fifth
/-lk/	milk, bulk	/-fs/	coughs, laughs
/-lb/	bulb	/-qs/	myths, baths
/-ld/	world, cold	/-qd/	breathed, bathed
/-lm/	helm, film	/-qz/	paths, wreathes

/-ln/	kiln	/-òt/	rushed, hushed
/-lv/	valve, solve	/-pts/	adopts, erupts
/-ntòt/	clinched	/-pqs/	depths
/-nst/	fenced, danced	/-tqs/	eighths
/-nzd/	cleansed	/-kts/	acts, ducts
/-hks/	links	/-kst/	next, fixed
/-lpt/	helped	/-ksq/	sixth
/-lps/	helps	/-dst/	midst
/- lkt/	milked	/-mpt/	prompt
/-lks/	silks, milks		
/-lbz/	bulbs	/-fts/	lifts, rafts
/-ltòt/	belched	/-fqs/	fifths
/-lmd/	(over-) whelmed	/-spt/	lisped
/-lnz/	kilns	/-sps/	wasps, grasps
/-lfq/	twelfth	/-sts/	toasts
/-lfs/	gulfs	/-skt/	asked
/-lvd/	solved	/-sks/	asks, desks
/-lvz/	wolves		
/-ksts/	texts	/-mpst/	glimpsed
/-ksqs/	sixths	/-lpts/	sculpts
/-mpts/	prompts	/-lfqs/	twelfths

CHAPTER

23 Sentence Stress

In a sentence there are certain words which are spoken more loudly than the others. All utterances are made within the framework of a situation, context or previous utterance; they, therefore, convey the mood of the speaker besides conveying meaning. Stressing a wrong word in an utterance changes the meaning or emphasis. For example, a simple statement 'I can't see a great deal from here' spoken differently can convey different meanings (the strongly stressed words are italicized).

(i) I can't see a *great deal* from here.
(I can see a little though)
(ii) *I can't* see a great deal from here.
(But perhaps you can)
(iii) I can't *see* a great deal from here.
(But I can hear)

The following classes of words are usually stressed:

(a) Nouns
(b) Adjectives (modifiers of nouns)
(c) Verbs (main)
(d) Adverbs
(e) Demonstratives
(f) Numerals
(g) Interrogative pronouns
(h) Interjections
(i) Conjunctions in initial position in introductory dependent clauses
(j) Negative markers

The following classes of words generally do not take stress :

(a) Personal pronouns
(b) Auxiliary verbs (except when the negative particle n't is added to them)
(c) Articles
(d) Conjunctions (except when they occur in initial position in dependent clauses or in the beginning of the sentences)
(e) Preposition

Parenthetical phrases are also not usually stressed.

The functions of sentence stress may be divided into the following three groups.

(i) To convey new information
Examples : This is a *shop.*

There are *many books* in the shop.

There are *hundreds of books* in it.

(ii) To convey contradiction

Example : He *is* a good doctor

Stress on 'is' in the above sentence indicates that the speaker is contradicting somebody's statement : 'He isn't a good doctor'. Normally, the sentence would be spoken as 'He is a *good doctor*'.

(iii) To convey contrast or selection :

Example : They are coming with *us* (not with you).
Do you like *these* trousers? (not those).

(Courtesy, Krishana Mohan, N.P.Singh : *Speaking English Effectively*)

CHAPTER

24 Intonation

Intonation is the rise and fall of the voice in speaking, especially as this affects the meaning of what is being said.

FALLING TONE

a. Statements

1. She's |gone \home.
2. Her |name is \Geetha.
3. He |goes for a |walk \daily.
4. They |can't a|fford to \do it.
5. He |wanted to see you \yesterday.

b. Commands

1. |Sit \down.
2. |Open the \window.
3. |Come \here.
4. |Open the \door.
5. |Ring him \up.

c. Question-word Questions

1. |What's your \name?
2. |How \old are you?
3. |Why are you \late?
4. |What do you \want?
5. |Whose |pen is \this?

d. Choice Questions

1. |Is he |reading or \sleeping?
2. |Do you |need a |book or a \notebook?
3. |Do you |want |tea or \coffee?
4. |Would you |like to |meet him to|day or to\morrow?
5. |Will you |wait or \go?

e. Exclamations

1. |How \beautiful!
2. |How \wonderful!
3. |Good \God!
4. \Nice!
5. \Cheers!

f. Question Tags

1. He can \go, / \can't he?
2. It's a |fine \day, / \isn't it?
3. Lakshmi has \gone, / \hasn't she?
4. He's |sure to \come, / \isn't he?
5. They have \won, / \haven't they?

RISING TONE

a. Requests or Polite Commands

1. |Don't /move.
2. Please |stand /up.
3. |Come /here, please.
4. Con|vey /this to him.
5. |Could you |see me \this /evening?

b. Yes-No Questions

1. |Is he /coming?
2. |Were they /busy?
3. |Will he |come to/day?
4. |May I |go /now?
5. Did |Lata |sing a /song?

COMBINED TONES

a. The negative command is spoken with a rising tone and the question tag " will you" with a falling tone.

1. |Don't |sit /there / \will you?
2. |Don't |close the /door / \will you?
3. |Don't dis/turb him / \will you?

b. The affirmative command is spoken with a falling tone and the question tag with a rising tone.

1. |Come \here / /will you?
2. |Close the \door / /will you?
3. |Go a\way/ /will you?

Greetings and Some Common Phrases

a. When Meeting Someone

1. |Good \morning.
2. |Good \afternoon.

b. When Parting

1. |Good /night.
2. |Good/bye.

c. Some Common Phrases

1. /Thank you.
2. Ex/cuse me.
3. /Sorry.

QUESTIONS AND SHORT RESPONSES

Question-Word Question	Response
1. ˈWhat's your ˈname?	ˈJohn.
2. ˈHow ˈold are you?	ˈThirty-ˈfive.
3. ˈHas he ˌcome?	Yes, he ˈhas. No, he ˈhasn't.
4. ˈCan he ˈcome toˌmorrow?	Yes, he ˈcan. No, he ˈcan't.

(Courtesy: Krishna Mohan and N.P. Singh: *Speaking English Effectively*)

CHAPTER

25 Pronunciation Drills / Tongue Twisters

Tongue-twister is a word or phrase that is difficult to say quickly or correctly such as …

1. "She sells sea shells on the sea shore"
2. "A box of biscuits, a batch of mixed biscuits"
3. Peter Piper picked a peck of pickled peppers.
4. Red lorry, yellow lorry, red lorry, yellow lorry.
5. Unique New York.
6. Betty Botter had some butter,
   "But," she said, "this butter's bitter.
   If I bake this bitter butter,
   It would make my batter bitter.
   But a bit of better butter—
   that would make my batter better."
7. A big black bug bit a big black bear, made the big black bear bleed blood.
8. The sixth sick sheik's sixth sheep's sick.
9. Toy boat. Toy boat. Toy boat.
10. One smart fellow, he felt smart.
    Two smart fellows, they felt smart.
    Three smart fellows, they all felt smart.
11. Pope Sixtus VI's six texts.
12. "Surely Sylvia swims!" shrieked Sammy, surprised.
13. Shy Shelly says she shall sew sheets.
14. Three free throws.
15. I am not the pheasant plucker,
    I'm the pheasant plucker's mate.
    I am only plucking pheasants
    'cause the pheasant plucker's running late.

16. Sam's shop stocks short spotted socks.
17. A flea and a fly flew up in a flue.
    Said the flea, "Let us fly!"
    Said the fly, "Let us flee!"
    So they flew through a flaw in the flue.
18. Which wristwatches are Swiss wristwatches?
19. A noisy noise annoys an oyster.
20. I cannot bear to see a bear
    Bear down upon a hare.
21. Gertie's great-grandma grew aghast at Gertie's grammar.
22. Greek grapes.
23. How much wood would a woodchuck chuck
    if a woodchuck could chuck wood?
24. We surely shall see the sun shine soon.
25. Six short slow shepherds.
26. Which witch wished which wicked wish?
27. Old oily Ollie oils old oily autos.
28. The two-twenty-two train tore through the tunnel.
29. Silly Sally swiftly shooed seven silly sheep.
30. Twelve twins twirled twelve twigs.

CHAPTER

26 Formal and Informal English

Formal language refer to the use of formal words, scientific vocabulary, specialized terminology, and formal phrases and expressions. The use of formal language is a specific feature of technical communication. In formal language formal words are used. Colloquial and informal words and expressions are avoided.

Formal English is, for the most part, a written language. In general, it is confined to the realm of the serious: textbooks, academic or technical works, and most essays you will write at university. You would write formally in a letter of application for a job. Formal language tends to be impersonal and precise, and often uses long, carefully constructed sentences; the formal writer will avoid contractions and abbreviations, and will use a more specialized and complex vocabulary than that employed in everyday speech.

Following is a list of sample formal writing assignments

- Project/lab notebook
- Essays (interpretive, analytical, expository, persuasive)
- Essay exams
- Papers
- Reports
- Research projects/papers
- Case studies/Case book
- Articles
- Reviews
- Proposals
- Abstracts
- Editorials
- Letters

Informal English is the language spoken by most people every day. While educated speakers retain their knowledge of formal rules, they're more relaxed about grammar and less concerned with vocabulary when they're engaged in ordinary conversation. Informal writing reflects this relaxation. Sentences are shorter, and tend to avoid the more formal punctuation of the semi-colon and colon. Contractions and the first person are acceptable. You use informal language when you write to your friends.

CHAPTER

27 Developing Confidence

Confidence is that quality that enables us to make decisions or to take actions without the constant fear that we might be wrong. Confidence also enables us to face a mistake, admit it, correct it, and then go on to the next job with the assurance that we can handle it. When team members develop confidence in their abilities, they become willing to help their teammates as well as the customers. Team members working together is what teamwork is all about.

BENEFITING FROM MISTAKES

You benefit from incorrect decisions and actions if you learn how to avoid repeating your mistakes. Many supervisors recognize that when they say, "I don't condemn mistakes as long as you don't continue to make them." Therefore, a mistake, discovered and corrected, helps to improve teamwork. Edison remarked, "Don't call it a mistake; call it an education." Adopting this positive attitude enables us to obtain the maximum value—for the customer and for ourselves—from our work.

SELF-CONFIDENT INDIVIDUALS

- Have positive yet realistic views of themselves and their situations.
- Are willing to risk disapproval from others.
- Trust their own abilities.
- Tend to accept themselves.
- Do not feel they have to conform in order to be accepted.
- Have a general sense of control in their lives.
- Believe that, within reason, they will be able to do what they wish, plan, and expect.

Having self-confidence does not mean that individuals will be able to do everything. Self-confident people have expectations that are realistic. Even when some of their expectations are not met, they continue to be positive and to accept themselves.

People lacking self-confidence

- Depend **excessively** on the approval of others in order to feel good about themselves.
- Tend to avoid taking risks because they fear failure.
- Generally do not expect to be successful.
- Often put themselves down.
- Tend to discount or ignore compliments paid to them.

STRATEGIES FOR DEVELOPING CONFIDENCE

- **Emphasize Strengths** Give yourself credit for everything you try. By focusing on what you can do, you applaud yourself for efforts rather than emphasising end products. Starting from a base of what you might do helps you live within the bounds of your inevitable limitations.
- **Take Risks** Approach new experiences as opportunities to learn rather than occasions to win or lose. Doing so opens you up to new possibilities and can increase your sense of self-acceptance. Not doing so turns every possibility into an opportunity for failure, and inhibits personal growth.
- **Use Self-talk** Use self-talk as an opportunity to counter harmful assumptions. Then, tell yourself to "stop" and substitute more reasonable assumptions. For example, when you catch yourself expecting perfection, remind yourself that you cannot do everything perfectly, that it is only possible to try to do things and to try to do them well. This allows you to accept yourself while still striving to improve.
- **Self-evaluate** Learn to evaluate yourself independently. Doing so allows you to avoid the constant sense of turmoil that comes from relying exclusively on the opinions of others. Focusing internally on how you feel about your own behavior, work, etc. will give you a stronger sense of self and will prevent you from giving your personal power away to others.

CHAPTER

28 Introducing Oneself

PATTERNS

- My name is...(Vijay)
- I am .... years old.(20)
- I was born in .....(1990)
- I've lived in ..... for ..... years(Chennai, 10).
- I like ..... (music)
- I don't like .....(politics)
- My favourite ..... is .....(hobby is painting)
- I am a (student / doctor / journalist / musician / policewoman / etc)

Examples

1. Good morning, I'm Rajan.
2. Excuse me. My name is Krishnan.
3. I 'm a student.
4. I am an Engineer.
5. Hello, I am a Lecturer.
6. Hi, everybody. I am Geetha.
7. Good morning. I am Lakshmi, your sister's classmate.
8. A: Excuse me, I am looking for Mr. Satish.
   B: I am Satish. What can I do for you?
9. I'm Ravi, son of Mr. Krishnan.
10. A: Good morning, doctor. I'm Rajendran from Indian Pharmaceutical Company.
    B: Good morning. I'm very busy today. Could you come tomorrow?
    A: Certainly, doctor. Shall I come tomorrow morning?
11. Good evening, Ladies and Gentlemen. It is a pleasure to meet you all. I'm Ramanathan from Chennai. I represent Oxford University Press.
12. I feel privileged to meet you. I am Dhanya, your great fan. I love your books.
13. Excuse me, Sir. May I come in? I am P. Chandran. I wish to invite you to our college for a Guest Lecture.
14. Good morning, I'm Dr. Viswanathan, Professor of Mechanical Engineering.
15. A: Have we met before?
    B: I think we have.
    A: I'm Krishnan.
    B: Oh, yes. Now I remember. I'm Raman. We met at a conference last year.
16. A: Good morning, sir. May I come in?
    B: Good morning. Please come in.

A: I'm Rajan. Your old student.
B: Which Batch?
A: 2000 Batch, sir.
B: Oh, yes. Now I remember. Gopal's classmate?
A: Yes, sir. I am glad you recognize me.
B: Well, what brings you here?
A: I am going to apply for a job and I want a testimonial from you, Sir.
B: Oh, sure. Please wait for half-an-hour and I will give you the testimonial.
A: Thank you very much, sir.

17. A: Good morning, I am Krishnan, new Manager of this company.
B: Excuse me, my name is Vincent. I have joined this company as an Office Assistant.

CHAPTER

29 Asking for or Eliciting Information

Examples

1. Excuse me. Do you know the way to the bus stand?
2. Could you tell me which bus goes to Coimbatore?
3. Is there a good restaurant around here?
4. What time is the train to Delhi?
5. Could you help me?
6. What is the train fare to Erode?
7. Do you know how far is the petrol bunk from here?
8. I wonder if you could tell me how to reach the Head Post Office?
9. Can you help me?
10. Do you know where Mr. Johnson lives?
11. Has the Grand Trunk Express arrived yet?
12. Are you on leave tomorrow?
13. Have you ever been to England?
14. Can you speak French?
15. Is tomorrow a working day?
16. What is your date of birth?
17. Are you an Engineer?
18. Do you know Mr.Rajan?
19. Shall we go for a movie?
20. Is your sister a doctor?
21. Any idea about when he is likely to be back?
22. What is the course fee?
23. What's your mobile number?

CHAPTER

30 Describing Objects

The study of science helps us to be good observers of things in our surroundings. Every day we see things around us and whenever we want to tell other people about what we observe, we try to describe. It is an important part of science to describe things. Our ability to describe things will depend on whether we are able to give a correct picture of those things. It is important that we learn how to describe objects, people and scenes accurately.

Description will employ words and illustrations to outline the shape, the material, the purpose or function, and the relationship of one object, idea, or process to other objects, ideas, and/or processes. We describe things by comparison and contrast and also by division and classification.

Describing objects is one way of communicating information. By and large, descriptions begin from the general to the specific, from qualitative description to quantitative. To be able to describe things properly, a good observation would have been made and that observation would have to be translated to communicable language. Communicating as a process skill can be done in different ways.

Descriptions could either be qualitative or quantitative. The transition from qualitative description to more specific quantitative description will call for use of certain words to represent size, colour, smell, taste and texture. The teacher should encourage the students to look for appropriate vocabulary. The use of known standards of quantities will have to be introduced.

Previous experience can influence the description of certain objects. In the area of smell and taste, reference will often be made to a previous experience. " It smells like rotten egg" or "It tastes like sugar". These forms of description are accepted.

Further, a technical writer uses words to describe things and at the same time makes use of graphics to enhance the meaning of words. A graphic representation is helpful in knowing how a thing looks like and how it is used.

CHAPTER

31 Offering Suggestions and Recommendations

Some useful expressions for making recommendations are:

1. It is necessary to _____
2. _____ should be developed _____
3. _____ have to be _____
4. _____ ought to _____

I. Recommendations to control noise pollution.

Noise Pollution

Abnormally high noise levels not only impair hearing but also create nervous and emotional tension leading to high blood pressure and other health problems. Noise reduces the depth and quality of sleep and may adversely affect overall mental and physical health. School children are among the worst victims of noise pollution which causes a steep fall in concentration and loss of memory. Prolonged exposure to a high level of noise results in Noise Induced Hearing Loss (NIHL), both temporary and permanent.

Loudspeakers are the main source of noise. The other factors are road and rail traffic, aircraft and industrial units, shrill pressure horns and fire-crackers.

The following is a set of eight recommendations to control noise pollution.

1. There should be restrictions on the volume and pitch of loudspeakers. Especially at night the use of loudspeakers should not be permitted.
2. Election meetings and processions should not be permitted near educational institutions and hospitals as they are often noisy.
3. Every vehicle must have a silencer to absorb noise.
4. People should not live in the neighbourhood of airports. They should live outside the range of the airport din.
5. Industrial units should be established away from residential areas.
6. The use of shrill pressure horns should not be permitted.
7. The use of fire-crackers especially high-sounding 'bombs' should be stopped.
8. Trees and shrubs should be planted in front of buildings to absorb sound. Roadside plantations are also needed for this purpose.
9. Government should pass the "Noise Pollution Control Act" to check noise pollution.
10. People should be educated through the mass media about noise pollution.
11. Noise producing vehicles should be put out of use.
12. Silence zones should be observed where there are educational institutions, hospitals, etc.

II. The following are the recommendations to control air pollution in metropolitan cities like Chennai.

Air pollution

Air pollution is considered to be one of the most dangerous kinds of environmental pollution. Severe air pollution affects human health and causes many diseases. For instance, there occurs black lung disease among coal miners who have inhaled mine dust for many years. Similarly carbon monoxide which comes from gasoline motor exhausts and burning of coal reduces oxygen-carrying capacity of blood in man. Chlorine from bleaching cotton and flour attacks the entire respiratory tract and mucous membrane. Air pollution affects not only man but also the climate and ecology. Air pollution is mostly caused by the discharge of gases and particles from domestic fires, motor vehicles and factories.

The following is a set of eight recommendations to control air pollution.

1. Air pollution can be controlled by keeping the factories and mills away from residential areas.
2. Planting of trees helps in keeping the air clean.
3. People should be educated about the importance of preservation of our health and protection of plant and animal life.
4. Pollution from industry and power generation can be controlled by electrostatic precipitators which reduce smoke and dust.
5. Gaseous pollutants of industry and power station can be removed by differential solubility of gases in water.
6. Technology for control and emission needs to be adopted for all types of vehicles using petrol or diesel. In case of three wheelers, the authorities should insist that their engines are designed to run on liquefied petroleum gas.
7. A substitute to diesel should be found.
8. Licences to polluting industries should be revoked.
9. Emission standards should be enforced.
10. Rules and regulations should be framed to effectively control air pollution.

III. Recommendations to control water pollution.

Water Pollution

Clean drinking water is the key to human survival. It is a symbol of life. The UN agency, the World Health Organisation (WHO) estimates that 80 percent of all diseases in the world are caused by contaminated water. For example, typhoid and cholera are two common water-related diseases.

Water pollution is the result of domestic sewage mixing with drinking water. Drinking water contains germs. Rivers, lakes, ponds and seas are polluted by the chemicals, industrial effluents, suspended solids and bacteria. The sewage has damaged our water resources. Such discharges cause water borne diseases and epidemics. Wastes from slaughter houses, dairy and poultry farms, breweries, tanneries, paper and sugar mills, dyeing and viscose factories cause havoc to the rivers.

The following are the recommendations to control water pollution.

1. Pollution laws must be enforced and people should be educated about the seriousness of the situation.
2. All effluent, to be discharged should be treated up to a certain standard so that ground water doesn't get polluted.
3. Many industries are still discharging untreated effluent. Stringent punishment should be inflicted on such people. So the law needs to be very strict in handling such a situation.

4. Various kinds of wastes like paper pulp, municipal and industrial effluents, sewage and thermal pollutants can be recycled to advantage. For example, urban waste can be recycled to generate cheaper fuel gas or electricity.
5. The regulated use of thermonuclear reactions in controlled fusion reactors to produce cheap electricity could solve the problem of accumulation of waste.
6. Techniques introduced by CSIR for the control of water pollution should be successfully used for the removal and reuse of pollutants from industrial wastes.
7. A technical cell should be created to advise the private contractors (who just drill and install a tube well) on the designs of the tube well so that India's underground system does not get destroyed.
8. Water pollution can be prevented through chemical treatment.
9. The Ganga Action Plan aims at setting up sewage treatment and renovating and augmenting considerably the capacity of existing sewage pumping stations, constructing new stations and laying additional sewers.

IV. Suggestions for the proper maintenance of two-wheelers.

An indifferently maintained vehicle breaks down when one badly needs it. A badly maintained vehicle could also be a source of danger as it is more prone to road mishaps than a well-maintained one. For safety and vehicle longevity the following tips should be followed.

1. The brakes should be checked every day. The brake cable should also be checked for cracks or signs of wear that could cause sticking or failure. Further, the brakes ought to be lubricated with cable lubricant.
2. The tyres should be maintained properly. An optimum level of air pressure will provide maximum road-grip, stability, riding comfort and tyre life. Therefore, the tyres are to be checked for cuts, embedded nails or other sharp objects. The tyre pressure should be checked once a week.
3. It is always better to encounter speed breakers and pot holes at a slow speed. This way, one can avoid both loss of control and mechanical damage to the vehicle.
4. The spark plug should be cleaned at least once in 15 days. It will always be better to have a spare spark plug.
5. For the smooth running of the vehicle, petrol and diesel should not be mixed.
6. The two wheelers should not be exposed to too much rain or sunshine.
7. Frequent use of the clutch should be avoided.
8. The two-wheeler is primarily meant for two people. In their own interest the owners of two-wheelers should not overload the vehicle.
9. Above all, the vehicle should be serviced regularly to keep it in good running condition.

(*Courtesy* : Learning to Communicate by Dr. V. Chellammal)

V. Guidelines to be followed by pedestrians (or) Recommendations for road safety.

Traffic volumes on roads have increased manifold. And with that, one witnesses a staggering increase in the number of accidents, several of them causing grievous injuries such as loss of a limb or even life. Road safety is important for every one, be it pedestrians, car drivers, users of public transport or two wheelers. Every road user must be concerned not to be a cause for road accidents. He/ She must cultivate respect for law of the road as well as for life.

The following guidelines are meant for pedestrians.

1. You should walk on the pavement or keep to the extreme left of the road. Walking in the middle of the road could be risky.
2. Where there are subways you should use them. Though long, they are absolutely safe.

3. You should not ignore traffic signals as they are meant for your safety.
4. If you wish to walk across the road, do so only at the zebra crossing or when the traffic constable signals to you to cross.
5. Before crossing the road, look on either side to make sure that the road is clear of fast moving vehicles.
6. You should avoid using the cell phone while walking along the road. Better concentrate on the road than on your cell phone.
7. As a pedestrian you should be familiar with the rule of the road and traffic signals.
8. When you see a vehicle approaching, better stop and let it go. After all, wheels move faster than legs.
9. You should avoid crossing suddenly and you should not walk on road dividers.

VI. Recommendations to save water.

Cool drinking water is the key to human survival. It is a symbol of life. More than 80% of rural and 50% of urban, industrial and irrigation water requirements in the country are met from ground water. We should be economical in the use of water.

1. A hotel could save water by using paper plates and napkins to avoid using water for cleaning.
2. We should use a device which will detect wastage of water and cut off water to the sources of wastage.
3. When we don't need water, we should turn the tap off and not leave it running.
4. We should see to it that the water-pipe is not leaking.
5. More and more dams should be constructed to store water.
6. There should be roof-top rain-water harvesting to recharge the underground table through existing wells or bore-wells or by constructing new wells, bore-wells, shafts or spreading basins.
7. We should capture and recharge city storm water run-off through wells, shafts and storm water drains.
8. We should harness run-off in catchments by constructing structures such as check dams, percolation trenches, and sub-surface dykes.
9. Surplus run-off in the village catchments and watersheds should be impounded in the village ponds and percolation tanks.

(Source: Learning to Communicate)

VII. Recommendations to save petrol.

Petrol is becoming dearer day-by-day. It is truly said, "Waste not, want not." We should not waste petrol. We should take all possible steps and precautions to save petrol.

1. For fuel economy, we should keep the engine in good condition.
2. A two-stroke engine gives less mileage. A vehicle should be fitted with an engine that gives a high mileage.
3. We should not keep the engine running when the vehicle is not in motion.
4. Frequent change of gear should be avoided to save petrol.
5. The tyres should be maintained properly. An optimum level of air pressure will provide maximum economy of fuel besides riding comfort and tyre life.
6. We should use the correct engine oil for the proper functioning of the engine.
7. The vehicle should be serviced regularly as an ill-maintained vehicle consumes more petrol.
8. To get maximum mileage there should be mileage tuning which in turn will lead to less consumption of petrol.
9. Clutch driving should be avoided. Resting one's foot on the clutch pedal leads to more fuel consumption.

VIII. Safety measures in nuclear power plants.

Nuclear fuels such as Uranium and Plutonium are radioactive. They give out dangerous and very penetrative radiation. During fission even more radiation is produced. This radiation is harmful even in small quantities. It attacks living tissues and it can alter the genes in body cells. Such mutation can affect later generations. In large quantities its effect is lethal.

Nuclear reactors produce wastes which remain dangerously radioactive for hundreds or perhaps thousands of years. The disposal of these wastes is a serious problem. At present, they are often stored in underground tanks or sealed in containers and dropped into deep ocean trenches. Neither method is very satisfactory. The threat of environmental pollution is always there.

Nuclear plants need to be suitably located away from densely populated areas. Adequate waste disposal facilities must be available. The reactor ought to be surrounded by concrete and steel walls thick enough to prevent any escape of radiation. The working of the reactor should be slowed down by inserting control rods, also known as neutron absorbing rods, into the core. It is necessary that the reactor has emergency systems to cope with the unexpected failure of the fuel elements of the cooling system.Workers at the plants must protect themselves against possible contamination by using gloves, overshoes, respirators etc. Radiation measuring instruments have to be used to monitor radiation levels in and around the plants. It should be ensured that all releases into air and water are kept well below permissible levels.

IX. Safety measures in a chlorine plant.

Cylinders should be stored in an upright-position. Full and empty cylinders should not be stored together. The storage area should be separate from places where compressed gas containers and other inflammable materials are stored. Also, care should be taken to keep the storage area far away from elevators, gangways or ventilating systems, because in the event of a chlorine leak dangerous concentrations of chlorine may spread rapidly.

While transporting chlorine cylinders, they must be carefully checked, clamped or otherwise suitably supported to prevent shifting and rolling. They should not be permitted to drop and no object should be allowed to strike them with force. They should not project beyond the sides or ends of the vehicles in which they are transported. *Prior to filling the cylinder*, each cylinder should be completely emptied, thoroughly cleaned and dried. Another foolproof test to rule out surface defects, corrosion and the presence of foreign matter must be carried out.

Only cylinders which have undergone a hydraulic test should be used for filling chlorine gas.

Special care must be taken not to fill cylinders with excess chlorine gas or liquid chlorine.

People who have asthma, certain types of bronchitis, other chronic lung conditions and other kinds of respiratory problems should not be employed in a chlorine plant.

The employees should be cautioned to prevent leaks and avoid inhalation of gas and direct contact with the liquid. They should be told to report to the authorities immediately in the case of equipment failure.All workers must be instructed and trained to adopt preventive measures, in case of an emergency.

All employees should be made aware of first aid equipment such as emergency showers, eye-baths, fire fighting equipment, fire alarms, the use of personal protector equipment and the like and their location in the plant. They should be trained to use them in case of emergency.

(*Courtesy* : Teachers' Book, pp.84-85)

Do it Yourself

1. Write a set of eight recommendations to control water pollution. (Apr./May 2000)
2. Write a set of eight recommendations that will help the public to save petrol. (M.Q.P.)
3. Write a set of eight recommendations that should be followed to save water. (M.Q.P.)
4. Write a set of eight recommendations for safety measures in nuclear power plants.
5. Write a set of eight recommendations for safety measures in a chlorine plant.
6. Write a letter to your brother who is going to write his Board Examination in April 2003. Offer your suggestions and recommendations to him (at least 8) as to how he should prepare for the Examination. (M.Q.P.)
7. Write a set of eight important recommendations to a group of students from Europe who have come to spend their one month's vacation in India. The suggestions may be on the lines of food, travel, transport, climatic conditions, etc. to make their stay comfortable and enjoyable. (Nov./Dec. 2004)

CHAPTER

Expressing Opinions (Agreeing/Disagreeing)

1. The following phrases are used to show agreement.
   - i. Absolutely
   - ii. You are right
   - iii. I could not agree more
   - iv. I agree.
   - v. So do I.
   - vi. Me too.
   - vii. You're right.
   - viii. That's right.
   - ix. Good idea.
   - x. I think that's a good idea.
   - xi. There are many reasons for …
   - xii. There is no doubt about it that …
   - xiii. I simply must agree with that.
   - xiv. I am of the same opinion.
   - xv. I am of the same opinion as …
   - xvi. I completely/absolutely agree with …
2. The following phrases are used to express disagreement.
   - i. But…
   - ii. I am afraid…
   - iii. I can't go along with that view.
   - iv. I'm not sure.
   - v. I disagree.
   - vi. I don't think so.
   - vii. (No.) That's not right.
   - viii. Yes, but...
   - ix. (I'm sorry, but) I don't agree.
   - x. There is more to it than that.
   - xi. The problem is that …
   - xii. I (very much) doubt whether …
   - xiii. This is in complete contradiction to …
   - xiv. What is even worse, …
   - xv. I am of a different opinion because …
   - xvi. I cannot share this / that / the view.
   - xvii. I cannot agree with this idea.
   - xviii. What I object to is …
   - xix. Unlike … I think …

Read the following expressions and identify whether each of them is used to express agreement or disagreement.

	Expression	Agreement / Disagreement
a.	I wonder if you could agree with.	Agreement
b.	That's quite right.	Agreement
c.	That's quite true.	Agreement
d.	I don't think I can.	Disagreement
e.	Oh, absolutely.	Agreement
f.	I am afraid, I can't accept.	Disagreement
g.	I don't think I can.	Disagreement
h.	Personally, I tend to agree with.	Agreement
i.	Actually, I think.	Disagreement
j.	That's not the way I see it.	Disagreement
k.	That's what I was thinking.	Agreement

CHAPTER

33 Giving Instructions

To give instructions the root forms of verbs should be used. (root : the part of a word on which the other words are formed. 'Walk' is the root form of 'walks', 'walked', 'walking' and 'walker').

Examples

1. Don't touch……
2. Shut down……..
3. Open only……
4. Wear apron……
5. Handle……..
6. Rinse……..
7. Get ready……..
8. Never board…….
9. Always form a queue……..
10. Move away.....

I. Instructions to maintain a computer in good working condition.

1. Don't touch the cables.
2. Avoid touching the open sockets.
3. In case of sparks or short circuits, switch off the main supply and open all the doors and windows.
4. If any sound comes from the UPS, immediately shut down the system.
5. Avoid touching the monitor.
6. Always shut down the system when it is not in use.
7. Don't misplace and replace the equipment.
8. Don't handle the equipment roughly.
9. Shut down the system properly.
10. Don't rest your legs anywhere on the stabilisers or UPS.
11. While working on the net, open only minimum number of required sites so that you can get quick access.

II. Safety instructions in a chemical engineering lab.

1. Do not work in the laboratory barefoot. Wear shoes to protect your feet.
2. Do not handle the apparatus and instruments roughly.
3. Do not wear gold ornaments, wrist watches, etc., while working in the lab.
4. Do not allow chemicals to come into contact with your skin.
5. Keep all the doors and windows open while working in the laboratory.
6. Keep your working place neat and tidy.

7. Switch off the power supply immediately after completing the experiment.
8. Arrange the apparatus in order after the experiment is over.
9. Dilute acids and prepare solutions only under the guidance of the staff.
10. Don't wear loose clothes.
11. Wear apron and gloves while handling the chemicals.
12. Take care not to spill the chemicals on the floor.
13. Handle all glassware items carefully.
14. Always rinse the apparatus well both before and after use.

III. The following instructions that must be followed by all pedestrians.

1. Walk on the pavement or keep to the extreme left of the road.
2. Use subways; though long, they are absolutely safe.
3. Avoid crossing suddenly.
4. Don't walk on road dividers.
5. Don't ignore traffic signals; they are meant for your safety.
6. Cross the road only at the zebra crossing or when the traffic constable signals to you.
7. Before crossing the road, look on either side to make sure that the road is clear of fast moving vehicles.
8. Avoid using the cell phone while walking along the road.
9. Be sober. Don't be under the influence of liquor or drugs.
10. Be familiar with the rule of the road and traffic signals.
11. When you see a vehicle approaching, better stop and let it go.

IV. Eight instructions to save petrol.

1. For fuel economy, keep the engine in good condition.
2. Fit the vehicle with an engine that gives high mileage.
3. Don't keep the engine running while the vehicle is not in motion.
4. Inflate the tyres at an optimum level of air pressure.
5. Use the correct engine oil for the proper functioning of the engine.
6. Service the vehicle regularly; an ill-maintained vehicle consumes more petrol.
7. Avoid clutch driving. Resting one's foot on the clutch pedal leads to more fuel consumption.
8. Avoid frequent change of gear to save petrol.

V. Instructions to be followed by the users of buses.

1. It is necessary that you should get in or out of the bus when it comes to a complete halt. A moving or running bus can cause fatal accidents.
2. You should avoid foot-board travelling and hanging out on the sides and back of the bus. It could prove extremely dangerous. After all, "Prevention is better than cure".
3. You should not run after a bus which has already left the stop.
4. You should get ready to alight before your stop arrives.
5. You should never board or get out of the bus at intersections.
6. You must always form a queue for getting into the bus leaving way for people to get down.

7. You ought to move away from the bus after you get off or in case you are not able to board.
8. In the interest of your safety, it is necessary that you look out for vehicles coming from behind while getting down.
9. You should not keep your elbow or head out of the window. Vehicles coming from the side could hit you.
10. You must not lean out of the bus to wave. You could hit a pole.
11. To be sure of catching your bus, you should arrive well in time, and make sure that you catch the right bus.
12. While travelling on a bus, you should not smoke or be under the influence of drugs.
13. You should not carry explosives.
14. It is aptly said, "Less luggage, more comfort". You should not carry heavy luggage.
15. You should be considerate to the old as well as to the handicapped.

Do it Yourself

1. As the Maintenance Engineer of a Software Company, give a set of eight instructions that are to be followed by the lab assistants while handling sophisticated equipment. (M.Q.P.)
2. Write eight instructions to maintain a computer in good working condition. (Apr./May 2002)
3. Write eight instructions that must be followed by all pedestrians. (Apr./May 2002)
4. Write a set of eight instructions to control air pollution in metropolitan cities like Chennai. (Apr./May 2000)
5. What instructions would you give your tourist friend from the USA, to make his trip to Chennai, a pleasant one? Give a list of eight most important instructions pertaining to food, stay, travel, etc. (Apr./May 2003)
6. Write a set of eight instructions that are to be followed in a computer laboratory. (Apr./May 2003)
7. Write a set of eight instructions that must be followed in a Chemical Engineering Lab.
8. Write a set of eight instructions that must be followed by the users of buses.
9. Write a set of eight instructions that must be followed as safety measures in a Chlorine Plant.

PART III

Reading

CHAPTER

34 Reading Comprehension

'Comprehension' means 'the power of understanding'. It is an exercise aimed at improving or testing one's understanding of a language.

A comprehension exercise consists of a passage upon which questions are set to test the student's ability to understand the content of the given text and to infer information and meanings from it.

Part II of the Question Paper will have a passage followed by a set of questions in the form of True or False statements, short answers, choosing the correct answer etc.,

Here are a few practical hints for your guidance:

1. Read the passage fairly quickly to get the general idea.
2. Read again, a little slowly, so as to know the details.
3. Study the questions thoroughly. Turn to the relevant portions of the passage, read them again, and then rewrite them in your own words, neatly and precisely.
4. If you are asked to give the meaning of any words or phrases, you should express the idea as clearly as possible in your own words.
5. Finally, after you have answered all the questions, go through them to check the grammar, spelling and punctuation of what you have written.

Examples

Passage 1

Read the following passage and answer the questions that follow.

It is like a horror movie without an end. Scenes of death and devastation brought on by the "worst ever quake to hit the country since independence" are now etched permanently in our memory. On the morning of January 26, the unstable earth under the Rann of Kutch in northern Gujarat heaved and collapsed causing an earthquake that recorded 6.9 in the Richter scale (China recorded 7.4 and the U.S. measured 7.9 due to different methods of calculation). But no scale can possibly measure the magnitude of the desolation and sorrow that the killer quake left behind in the villages, towns and cities of Gujarat. Places like Bhuj, Anjar, Bachau and Sukhpur have been completely flattened. Buildings collapsed trapping thousands of people in the rubble and left the survivors with nothing to live for. We saw the grief-stricken faces of those who had lost their families, distraught men, women and children huddled in the open in the cold night, terrified villagers on foot desperately looking for places that might be safe.

What causes an earthquake? The surface of the earth is made of huge plates. They slowly move over, under, and past each other. Sometimes the movement is gradual. At other times the plates lock into one another unable to release the energy created by the movement. When this accumulated energy grows strong enough, the plates break free and snap into a new position. Vibrations make the structures around quiver and shake and fall.

The fracture in the earth's crust is called a "fault". If all the stress has not been released, more tremors (aftershocks) can occur in the fault zone. The epicentre is the point on the earth's surface directly above where the quake is focussed.

Earthquakes can occur beneath the ocean floor. Then immense waves (tsunamis) as high as 15 metres caused by the freed energy travel across the waters at great speeds and reach the shores. They engulf the coastal areas and cause severe damage.

India has a grim history of earthquakes. Calcutta (1737, 300,000 dead) and Assam (1897) saw the worst of them. A series of tremors ravaged Udaypur, Uttarkashi, Chamoli, Latur and Jabalpur in the last twelve years. The Rann of Kutch itself lost 2000 people in the 1819 quake and again last year. Dams built in the quakeprone areas, concentration of population, decrease in ground water level can all be reasons for these disasters, say environmentalists. Dr. R. Bilham of Colorado warns that because of the southward movement of the surface, 60 per cent of the Himalayas are overdue for a quake.

1. Say whether the following statements are True/ False.
   (a) Rann of Kutch suffered earthquake in the year 1897.
   (b) Earthquakes in the oceans cause huge waves upto 15 metres.
2. Write short answers within 1 or 2 sentences.
   (a) Mention what is 'fault'.
   (b) What is epicentre?
3. Choose the correct option among the following.
   (a) Mention which one of the following is not a cause for earthquake:
      (i) Dams built in the quake prone areas.
      (ii) Concentration of population.
      (iii) Decrease in ground water.
      (iv) Himalayan mountains.
   (b) The exact power of January 26 earthquake in Kutch is
      (i) 6.9 in Richter scale (ii) 7.4 in Richter scale
      (iii) 7.9 in Richter scale (iv) 6.7 in Richter scale
4. (a) The worst earthquake which hit independent India is _____. (Complete the sentence)
   (b) Because of the _____ movement, 60% of the Himalayan region is overdue for a quake. (Fill in the blank with a suitable word)
5. (a) Tsunami is the name of _____. (Complete the sentence)
   (b) Another name for earthquake is _____. (Fill in the blank with suitable words)

ANSWERS

1. (a) False (b) True
2. (a) A 'fault' is a fracture in the earth's crust.
   (b) The epicentre is point on the earth's surface directly above where the quake is focussed.
3. (a) Himalayan Mountains.
   (b) 6.9 in Richter scale.
4. (a) The worst earthquake which hit independent India is the one which occurred on 26th January 2001 at the Rann of Kutch.
   (b) Because of the southward movement, 60% of the Himalayan region is overdue for a quake.
5. (a) Tsunami is the name of huge waves caused by earthquakes occurring beneath the ocean floor.
   (b) Another name for the earthquake is "killer quake".

Passage 2

Read the following passage and answer the questions given below.

The heavy damage caused by the recent spell of rain has made the experts in highways put forward a strong case for the laying of Cement Concrete (CC) roads. They say that the advantages of CC roads far outstrip those of bituminous roads in cost, longevity, maintenance and riding comfort. They stress that while the Tamil Nadu Government spends Rs.10 crores for relaying the bituminous roads in Madras alone after every strong monsoon, the CC roads will last 40 years and require no maintenance. Moreover, cement is available in plenty now.

As Cement Concrete roads have a smooth surface, they provide better riding comfort and the consumption of fuel will be less. Visibility at night will be better. It will not disintegrate due to ageing. Many experts say that the laying of CC roads on the national highways will be cheaper than the laying of bituminous roads. However, the supervisory engineering staff and the quality control staff should be strict when laying the CC roads. According to rough calculations, while the laying of bituminous roads over a stretch of one km will cost Rs.15 lakh, the CC road will entail an expenditure of Rs. 10 lakh only. But the construction of CC roads in rural areas will be initially costlier than bituminous roads.

Bituminous roads do not last long because water penetrates the bitumen layer and seeps into the cavities below, thus forming a film between the two. Later, when vehicles ply over the wet surface, the upper layer is stripped away and 'pot holes' are formed. But this does not happen on CC roads.

Cement Concrete roads have a few disadvantages. It is not easy to cut them open to lay electricity or telephone cables. During day-time, visibility is better on bituminous roads; on the other hand, on CC roads visibility is better at night. Joints pose a problem on CC roads and research is being done on how to avoid joints in them.

1. Give the meaning of the following as used in the passage.
   (a) spell (b) longevity (c) seep
2. Complete the following by adding not more than 15 words each.
   (a) If the quality control staff are not strict when the CC roads are being laid,…..
   (b) Although the CC roads have a few disadvantages,….
3. Give short answers in not more than 15 words each.
   (a) Why are bituminous roads no longer an economical proposition?
   (b) Why is it necessary to relay the bituminous roads after the monsoon?
   (c) Give two disadvantages of CC roads.
   (d) How are 'pot-holes' formed?
4. State whether the following statements are true or false:
   (a) The initial cost of laying CC roads in rural areas will be more than Rs.15 lakhs per km.
   (b) Bituminous roads have less life than CC roads.
   (c) Now there are a few CC roads in Madras.
   (d) At all times, the visibility on CC roads is better than the visibility on bituminous roads.
5. Choose the best alternative.
   (a) The root cause for stripping is
      (i) Poor supervision.
      (ii) Lax quality control.
      (iii) Vehicles plying on wet surfaces.
      (iv) The water between the two layers of the road.

(b) How could CC roads reduce the fuel consumption?
  (i) Bumpy roads increase the fuel consumption.
  (ii) Riding comfort is directly related to fuel consumption.
  (iii) Visibility will be better at night.
  (iv) CC roads will not disintegrate due to ageing.

ANSWERS

1. (a) a period of time during which something lasts
   (b) long life
   (c) to flow slowly
2. (a) If the quality control staff are not strict when CC roads are being laid, their cost will be very high.
   (b) Although the CC roads have a few disadvantages, the advantages of CC roads outstrip those of bituminous roads in cost, longevity, maintenance and riding comforts
3. (a) Bituminous roads are no longer an economical proposition because they cost more than CC roads and also they do not last long.
   (b) It is necessary to relay the bituminous roads after the monsoon because water penetrates the bitumen layer and seeps into the cavities below, thus forming a film between the two.
   (c) It is not easy to cut them open to lay electricity or telephone cables. Visibility is better only at night. Joints pose a problem on CC roads.
   (d) When vehicles ply over the wet surface of bituminous roads, the upper layer is stripped away and 'pot holes' are formed.
4. (a) True (b) True (c) False (d) False
5. (a) The root cause for stripping is vehicles plying on wet surfaces.
   (b) Riding comfort is directly related to fuel consumption.

Passage 3

Read the passage and answer the questions that follow it. (Apr./May 2003)

The Underworld

Let us take a brief look at the planet on which we live. As earth hurtles through space at a speed of 70,000 miles per hour, it spins, as we all know, on its axis, which causes it to be flattened at the Poles. Thus, if you were to stand at sea level at the North of South Pole you would be 13 miles nearer the centre of the earth than if you stood on the Equator.

The earth is made up of three major layers —a central core, probably metallic, some 4000 miles across, a surrounding layer of compressed rock and to top it all a very thin skin of softer rock, only about 20 to 40 miles thick – that's about as thin as the skin of an apple, talking in relative terms.

The pressure on the central core is unimaginable. It has been calculated that at the centre it is 60 million pounds to the square inch, and this at a temperature of perhaps 10,000 degrees Fahrenheit. The earth's interior, therefore, would seem to be of liquid metal and evidence for this is given by the behaviour of earthquakes.

When an earthquake occurs, shock waves radiate from the centre just as waves radiate outwards from the point where a stone drops into a pond. And these waves pulsate through the earth's various layers. Some waves descend vertically and pass right through the earth, providing evidence for the existence of the core and an indication that it is fluid rather than solid. Thus, with their sensitive instruments, the scientists who study earthquakes, the seismologists, can in effect X-ray the earth.

Iceland is one of the most active volcanic regions of the world. And it was to Iceland that Jules Verne sent the hero of his book '*A Journey to the Centre of the Earth*'. This intrepid explorer clambered down the opening of an extinct volcano and followed its windings until he reached the earth's core. There he found great oceans, and continents with vegetation. This conception of a hollow earth we now know to be false. In the 100 years since Jules Verne published his book, the science of vulcanology, as it is called, has made great strides. But even so the deepest, man has yet penetrated is about 10,000 feet. This hole, the Robinson Deep mine in South Africa, barely scratches the surface; so great is the heat at 10,000 feet that were it not for an elaborate air-conditioning system, the miners working would be roasted. Oil borings down to 20,000 feet have shown that the deeper they go, the hotter it becomes.

The temperature of the earth at the centre is estimated to be anything between 3,000 and 11,000 degrees Fahrenheit. Some scientists believe that this tremendous heat is caused by the breaking-down of radio-active elements, which release large amounts of energy and compensate for the loss of heat from the earth's surface. If this theory is correct, then we are all living on top of a natural atomic power house.

1. Choose the response which best reflects the meaning of the text.

(a) The outer layer of the Earth is compared to the skin of an apple because
  (i) it is only 20 to 45 miles thick.
  (ii) it is thin in proportion to the Earth's mass.
  (iii) it is relatively thin compared with the central core.
  (iv) it is softer than the other layers.

(b) Which of the following is not true?
  It is thought that the interior of the Earth is not solid because
  (i) there is great pressure at the centre.
  (ii) earthquake waves can move vertically.
  (iii) the outer layer is made of rock.
  (iv) the heat at the centre is too great.

(c) The Robinson Deep mine in South Africa is
  (i) too deep to work in.
  (ii) too hot to work in.
  (iii) still in use.
  (iv) very close to the surface.

(d) Since the publication of Jules Verne's book it has been proved that
  (i) the centre of the earth is not hollow.
  (ii) oil borings cannot go deeper than 20,000 feet.
  (iii) the earth is hot at the centre because heat is lost at the surface.
  (iv) the earth is in danger of exploding.

(e) The behaviour of earthquakes is the evidence to show that
  (i) the outer layer is not semi-solid.
  (ii) the interior of the earth is not solid.
  (iii) the interior layer consists of compressed rock.
  (iv) earthquakes can be controlled.

(f) An elaborate air-conditioning system was indispensable in Robinson Deep Mine because of the
  (i) excessive internal pressure.
  (ii) extreme cold condition.
  (iii) excessive internal heat.
  (iv) depth of the mine itself.

2. Decide whether the following statements are true or false.
   (a) If you stand at the Equator you will be closer to the centre of the Earth than if you stand at the Poles.
   (b) The shock waves from an earthquake cannot pass through the Earth's central core.
   (c) Jules Verne suggested that the Earth's centre was hollow.
   (d) It is not known exactly how hot it is at the centre of the Earth.
   (e) The earth travels through the space at a speed of 90,000 miles per hour.
   (f) The earth is compared to a natural atomic power house.

3. Choose the definition which best fits these words or phrases as they are used in the text.
   (a) in effect
      (i) probably (ii) effectively
      (iii) actually (iv) accurately
   (b) intrepid
      (i) daring (ii) foolish
      (iii) experienced (iv) curious
   (c) has made great strides
      (i) caused a sensation (ii) been accepted by scientists
      (iii) developed immensely (iv) improved mining techniques
   (d) compensate for
      (i) prepare for (ii) allow for
      (iii) make up for (iv) exchange for

ANSWERS

1. (a) (ii) it is thin in proportion to the Earth's mass
   (b) (ii) the outer layer is made of rock.
   (c) (ii) too hot to work in.
      (iii) still in use.
   (d) (i) the centre of the earth is not hollow.
   (e) (ii) the interior of the earth is not solid.
   (f) (iii) excessive internal heat.

2. (a) False
   (b) False
   (c) True
   (d) True
   (e) False
   (f) True

3. (a) actually
   (b) daring
   (c) developed immensely
   (d) make up for

Passage 4

Read the following passage and answer the questions given below.

The idea of generating energy from the electrochemical compound of hydrogen and oxygen can be traced back more than 150 years to the British physicist Sir William Robert Grove (1811-1896). In 1839, he constructed a battery which could indeed generate energy directly from hydrogen and oxygen. Barely 3 years later, in 1842 he improved his design. However, his invention did not catch on.

Daimler Benz of Germany is the first company in the world to introduce a road-worthy electronic car which does not draw its energy from storage batteries. It obtains it directly, depending on its requirements, on the basis of a chemical reaction between hydrogen and air. The energy is generated by means of fuel cells which are fed by two hydrogen tanks. This enables a large passenger-car in the new V-class Mercedes to accommodate and transport six passenger cars for a distance of approximately 250 km on a full tank.

More importantly, this car is eco-friendly and relatively noiseless. The electronic motor under the bonnet purrs so softly that it is drowned by the other sounds such as those made by the wheels and the wind current. Even the energy generator the fuel cell is silent. Occasionally you can hear the muffled sound of the compressor. The exhaust termed the 'used air pipe' by researchers emits only vapour. There are no traces of environmentally harmful nitric oxides and soot particles or carbondioxide which are responsible for the 'green house effect'. The fuel cell used in these cars is a true alternative to petroleum based fuels.

1. Give the meaning of the following as used in the passage.
   (a) Physicist (b) Alternative
2. State whether the following statements are true or false.
   (a) This car uses petroleum based fuel.
   (b) The British physicist discovered generating energy from chemical reaction between hydrogen and air.
3. Give short answers in not more than 15 words each.
   (a) Why is the exhaust of this car termed the 'used air pipe'?
   (b) How is the fuel cell used in this car different from storage battery?
   (c) Give any two main parts of this car.
   (d) Give any two items which cause the green house effect.
4. Choose the best alternative.
   (a) The fuel cell used in this car is a true alternative to petroleum-based fuels because_____
      (i) It is eco-friendly and noiseless (ii) It is eco-friendly and renewable
      (iii) It is cheap (iv) It is available in plenty
   (b) Which one of the following makes the least noise in this car?
      (i) Electronic motor (ii) Wheels
      (iii) Compressor (iv) Fuel cell
5. Complete the following by adding not more than 15 words each.
   (a) Other electronic cars derive their energy from storage batteries; in contrast _____
   (b) The sounds made by the wheels and the wind current are _____

ANSWERS

1. (a) an expert in physics
   (b) choice, that can be used instead of something
2. (a) False (b) False
3. (a) The exhaust of this car is termed the 'used air pipe' because it emits only vapour.
   (b) The fuel cell used in this car is different from storage battery because it obtains energy directly on the basis of a chemical reaction between hydrogen and air. It is fed by two hydrogen tanks.

(c) The two main parts of this car are: (i) The fuel cell and (ii) The exhaust
(d) Environmentally harmful nitric oxides and soot particles or cabondioxide cause the 'green house effect'.

4. (a) The fuel cell used in this car is a true alternative to petroleum-based fuels because it is eco-friendly and noiseless.
(b) Fuel cell

5. (a) Other electronic cars derive their energy from storage batteries, in contrast this car obtains it directly on the basis of a chemical reaction between hydrogen and air.
(b) The sounds made by the wheels and the wind current are eco-friendly and relatively noiseless. They drown the sound of the electronic motor.

EXERCISE

I. Read the following report and answer the questions that follow it. (M.Q.P.)

It has always been clear, of course that a properly designed media programme uses press, posters, printed leaflets and so on in proportions suitable to the nature of the product itself. In such a programme television occupies a relatively important place if the product is sold in small quantities, at a low price to the vast mass of the people. It is regarded as a quick acting medium, peculiarly suited to prompting 'impulse purchases'.

Larger items, such as cars and refrigerators, may be more profitably advertised in the press or other media which are examined in greater detail and more at leisure than television 'commercials' can possibly be. Nevertheless, in most mass advertising campaigns, the media are used in combination with each other, in proportions which tend to be more and more carefully, and even scientifically, determined.

It is significant, in this connection, that the poster medium and outdoor advertising generally, are now staging something of a recovery, after sustaining what at first looked like being a severe blow at the time of the introduction of commercial television into the United Kingdom in 1955.

Media planning is only one of the branches of the British advertising business, where more exact methods of measurement and the close study of statistical data have made considerable headway in recent years. The marketing and research departments of the advertisers themselves, and of the agents who act as middlemen between advertisers and media owners in the case of more than 50 percent of British advertising business, are constantly expanding. These departments have for sometime included a number of University graduates. Usually with particular qualification in statistics and the movement of University trained men into advertising, the business is growing as is the study of advertising problems in the universities themselves, particularly in the departments of economics, psychology and sociology.

1. Complete the following sentences choosing one of the options given below each sentence.

(a) A properly designed media programme uses
(i) television - if the commodity is produced on a large scale.
(ii) different sources of media according to the type of the product.
(iii) a media which depends on the impulse.

(b) The producers advertise large items
(i) on television 'commerical' to appeal to the people.
(ii) in press so that the customer may see details leisurely.
(iii) to make profit through poster advertisement.

(c) The poster medium and outdoor advertisement
(i) were started in the United Kingdom in 1955.
(ii) are again becoming popular these days.
(iii) nowadays depend upon commercial television.

(d) British advertising business
  (i) is one of the branches of media planning.
  (ii) has a close study of roads and ways in recent years.
  (iii) studies closely measuring methods of advertisement.

(e) The marketing and research departments of advertisers
  (i) have employed a number of university graduates.
  (ii) have appointed 50 percent middlemen.
  (iii) have started departments of economics, psychology and sociology.

(f) The advertising agents act as middlemen between
  (i) university students and advertisers.
  (ii) media owners and economists.
  (iii) those who are interested in advertising and those who own the media.

2. Give the most suitable meanings of the following words as they are used in the text choosing from the lists given below.

(a) Nevertheless
  (i) never before (ii) never (iii) however

(b) Severe blow
  (i) air (ii) a hard hit (iii) a flight

(c) Sociology
  (i) a study of ecology.
  (ii) a study of the nature and development of society.
  (iii) a study of the history of a nation.

(d) Headway
  (i) progress in difficult circumstances.
  (ii) the path of the leader.
  (iii) the movement of one's head.

(e) In proportions
  (i) in parts.
  (ii) in correct relation to other things.
  (iii) in proper terms.

(f) A close study
  (i) a thorough, detailed study.
  (ii) a study of secret material.
  (iii) the end of reading.

3. Answer the following questions.

(a) What are the different media available for advertising products?
(b) When were the poster medium and outdoor advertising affected terribly?
(c) What are the reasons for the growth in advertising?

II. Read the passage carefully, and then answer the following questions. (M.Q.P.)

Getting a chocolate out of a box requires a considerable amount of unpacking: the box has to be taken out of the paper bag in which it has arrived; the cellophane wrapper has to be torn off, the lid opened and the paper removed; the chocolate itself then has to be unwrapped from its own piece of paper. It is now becoming increasingly difficult to buy anything that is not wrapped in cellophane, polythene, or paper.

The package itself is of no interest to the people, who usually throw it away immediately.Useless wrapping accounts for much of the heap of garbage in the streets. So why is it done? Some of it, like the cellophane on meat is necessary, but most of the rest is simply competitive selling. This is absurd. Packaging is using up resources and messing up the environment.

Little research is being carried out on the costs of alternative types of packaging. Just how possible is it, for instance, for local authorities to salvage paper, pulp it, and recycle it as egg boxes? Would it be cheaper to plant another forest? Paper is the material most used for packaging – but very little is recycled.

A machine has been developed that pulps paper then processes it into packaging, e.g. egg-boxes and cartons. This could be easily adapted for local use. It would mean that people would have to separate their refuse into paper and non-paper, with a different dustbin for each. Paper is, in fact, probably the material that can be most easily recycled; and now, with massive increases in paper prices, the time has come at which collection by local authorities could be profitable.

Recycling of this kind is already happening with milk bottles, which are returned to the dairies, washed out, and refilled. But both glass and paper are being threatened by the growing use of plastic. More and more dairies are experimenting with plastic bottles. If all the milk bottles necessary were made of plastic, then British dairies would be producing the equivalent of enough plastic tubing that would encircle the earth every five or six days!

The trouble with plastic is that it does not rot. Some environmentalists argue that the only solution to the problem of ever growing mounds of plastic containers is to do away with plastic altogether in the shops, a suggestion unacceptable to many manufacturers who say there is no alternative to their handy plastic packs.

More research is needed for the recovery and re-use of various materials and for the cost of collecting and recycling containers as opposed to producing new ones. Unnecessary packaging, that is used just once, can be avoided. But it is not so much a question of doing away with packaging as using it sensibly. What is needed now is a more sophisticated approach to packaging. Let it be simplified to a considerable extent to minimize land pollution.

1. Choose the response which best reflects the meaning of the text.

   (a) The 'local authorities' are
      (i) the town council.
      (ii) the police.
      (iii) the paper manufacturers.
      (iv) the most influential citizens.

   (b) If paper is to be recycled
      (i) more forests will have to be planted.
      (ii) the use of paper bags will have to be restricted.
      (iii) people will have to use different dustbins for their rubbish.
      (iv) the local authorities will have to reduce the price of paper.

   (c) British dairies are
      (i) producing enough plastic tubing to go round the world in less than a week.
      (ii) giving up the use of glass bottles.
      (iii) increasing the production of plastic bottles.
      (iv) re-using their old glass bottles.

   (d) The environmentalists think that
      (i) more plastic packaging should be used.
      (ii) plastic is the most convenient form of packaging.

(iii) too much plastic is wasted.
(iv) shops should stop using plastic containers.

(e) The author thinks that
(i) the function of packaging is not important.
(ii) people will soon stop using packaging altogether.
(iii) not enough research has been done into the possibilities of recycling.
(iv) the cost of recycling is so great that it is better to produce new materials than use old ones.

2. State whether the following statements are true or false.

(a) Too many products nowadays are wrapped in unnecessary packaging.
(b) The countryside is being spoilt by the overproduction of packaging.
(c) It is possible to use paper again.
(d) The rising price of paper will make it worthwhile for local authorities to collect waste-paper.
(e) Plastic is difficult to destroy.

3. Choose the meaning or explanation which best fits the context in which it is used.

(a) Confined
(i) used for
(ii) restricted to
(iii) needed for
(iv) suited to

(b) Accounts for
(i) makes up
(ii) compensates for
(iii) is recovered from
(iv) is kept out of

(c) So why is it done?
(i) Why do people buy things they don't need?
(ii) Why is so much wrapping thrown away?
(iii) Why do the shops try to sell things people don't want?
(iv) Why is so much unnecessary wrapping used?

(d) Messing up
(i) spoiling
(ii) altering
(iii) improving
(iv) poisoning

(e) Recycled
(i) reduced
(ii) reproduced
(iii) re-used
(iv) retailed

(f) Handy
(i) attractive
(ii) easy to hold
(iii) convenient
(iv) easy to destroy

III. Read the passage and answer the questions following it. (Nov./Dec. 2002)

Almost all the energy that living things make use of comes from the sun. The chief exception is the gravitational pull of the earth itself, and of the moon upon the waters of the earth. The sun gives out enormous quantities of energy in the form of radiation.

The energy given out by the sun is created by the process known as nuclear fusion. Fusion means 'joining together'. The opposite process is nuclear fission, meaning, 'splitting apart' or 'dividing'. If either fission or fusion takes place quickly, the result is a great and sudden release of energy - an explosion, in fact. Both kinds of nuclear events can be created on earth but so far the only one that can be slowed down and controlled is fission.

Nuclear fission is the splitting of the nucleus of an atom. Only a few elements are suitable for use in this way, the most important ones being Uranium-235, Uranium-233 and Plutonium-239. When a nucleus of one of these elements is struck by a free neutron it breaks down into two lighter nuclei which fly apart at high speed, colliding with surrounding atoms. Their kinetic energy is converted into heat energy. At the same time, two or three free neutrons are released and one of them enters the nucleus of a neighbouring atom, causing fission to occur again; and so on. The reaction spreads very quickly, with more and more heat energy released and this is called a 'chain' reaction because the splitting of each nucleus is linked to another, and another and another.

If this reaction takes place in an atomic bomb, where nothing is done to slow it down, the result is a violent explosion that can destroy a town in a few seconds. Fission can also, however, take place within a construction called a nuclear reactor, or atomic pile. Here the highly fissile material (U-235, U-233, Pu-239) is surrounded by a substance that is non-fissile, for instance graphite. This material is called a moderator. The neutrons lose some of their energy and speed through colliding with the atoms of the moderator. Energy – heat energy – is still created on an enormous scale, but no expansion takes place. The moderator has another function : by slowing down the speed of the free neutrons, it makes it more likely that one of them will collide with the nucleus of a neighbouring atom to continue the chain reaction.

The chief advantage of nuclear energy is that it does not depend on any local factors. A nuclear reactor, unlike an oil-well or a coalmine does not have to be sited on top of a fossil-fuel source; unlike the solar energy unit, it does not have to go out of production when the sun is not shining; unlike hydro-electric power, it does not depend on a large flow of water which may be reduced during some seasons of the year. With an atomic power station, the only limiting factor is that of safety.

In the opposite process, nuclear fusion, two nuclei come together to form a new nucleus of a different kind and this process also releases energy on an enormous scale. Fusion can only occur under conditions of very great heat – at least 50,000,000 degress Celsius. A fusion reaction on earth has already been created - the hydrogen bomb. This is an uncontrolled reaction. It is not yet possible to produce a controlled fusion reaction that can be used for the production of useful energy.

1. Match the headings with the relevant paragraphs.

A	B
(a) Uncontrolled and moderate nuclear reaction	Paragraph I
(b) The advantages of nuclear energy	Paragraph II
(c) Fission and fusion	Paragraph III
(d) The nuclear fission chain reaction	Paragraph IV
(e) Energy from the sun	Paragraph V

2. Complete the following sentences by selecting the most suitable one from the options listed:
   (a) The aim of a nuclear reactor is
      (i) to establish a controlled chain reaction.
      (ii) to absorb neutrons travelling at a particular speed.
      (iii) to cause a rapid chain reaction in order to release the greatest amount of energy.
   (b) Destructive weapons can be obtained from
      (i) nuclear fusion.
      (ii) nuclear fission.
      (iii) both nuclear fission and nuclear fusion.
   (c) One of the functions of a moderator is
      (i) to speed up the nuclear reaction.
      (ii) to slow down the speed of free neutrons.
      (iii) to slow down the splitting of an atom.
   (d) A violent nuclear explosion can destroy a whole town.
      (i) within a few hours.
      (ii) within a few minutes.
      (iii) within a few seconds.
   (e) Nuclear fission gets repeated
      (i) when a group of neutrons enter the nucleus of the adjoining atom.
      (ii) when one of the neutrons enters the nucleus of the adjoining atom.
      (iii) when two or three neutrons go away from the adjoining atom.

3. Read the following statements and state whether they are 'True' or 'False'.
   (a) The hydrogen bomb is a good example of nuclear fission.
   (b) A few elements alone are suitable for use as nuclear fuels.
   (c) Nuclear energy depends upon the supply of fossil fuels.
   (d) An atomic power supply can supply the same quantity of energy throughout the year.
   (e) A hydro-electric power station can be built anywhere.
   (f) The sun's energy is released by the process of nuclear fusion.

IV. Read the text and answer the questions that follow it. (Apr./May 2003)

Space is a dangerous place, not only because of meteors but also because of rays from the sun and other stars. The atmosphere again acts as our protective blanket on earth. Light gets through, and this is essential for plants to make the food which we eat. Heat, too, makes our environment tolerable and some ultraviolet rays penetrate the atmosphere. *Cosmic rays* of various kinds come through the air from outer space, but enormous quantities of radiation from the sun are screened off. As soon as men leave the atmosphere they are exposed to this radiation but their spacesuits or the walls of their spacecraft, if they are inside, do prevent a lot of radiation damage.

Radiation is the greatest known danger to explorers in space. Doses of radiation are measured in units called 'rems'. We all receive radiation here on Earth from the sun, from cosmic rays and from radioactive minerals. The 'normal' dose of radiation that we receive each year is about 100 millirems (0.1rem); it varies according to where you live, and this is a very rough estimate. *Scientists have reason to think* that a man can put up with far more radiation than this without being damaged; the figure of 60 rems has been agreed. The trouble is that it is extremely difficult to be sure about radiation damage, a person may feel perfectly well, but the cells of his or her sex organs may be damaged, and this will not be discovered until the birth of (deformed) children or even grandchildren.

Early space probes showed that radiation varies in different parts of space around the Earth. It also varies in time because, when great spurts of gas shoot out of the sun (solar flares), they are accompanied by a lot of extra radiation. Some estimates of the amount of radiation in space, based on various measurements and calculations, are as low as 10 rems per year, others are as high as 5 rems per hour. Missions to the moon (the Apollo flights) have had to cross the Van Allen belts of high radiation and, during the outward and return journeys, the 'Apollo 8' crew accumulated a total dose of about 200 millirems per man. It was hoped that there would not be any large solar flares during the times of Apollo moon walks because the walls of the LEMS (Lunar Excursion Modules) were not thick enough to protect the men inside, though the command modules did give reasonable protection. So far, no dangerous doses of radiation have been reported, but the Gemini orbits and the 'Apollo 8' missions have been quite short. We simply do not know yet how men are going to *get on* when they spend weeks and months outside the protection of the atmosphere, working in a space laboratory or in a base on the moon. Drugs might help to decrease the damage done by radiation, but no really effective ones have been found so far. At present, radiation seems to be the greatest physical hazard to space travellers, but it is impossible to say just how serious the hazard will *turn out to be* in the future.

1. Choose the response which best reflects the meaning of the text.
   (a) Scientists have fixed a safety level of
      (i) 10 rems per year.
      (ii) 60 rems per year.
      (iii) 100 millirems per year.
      (iv) 5 rems per hour.
   (b) The spacemen were worried about solar flares when they were
      (i) Crossing the Van Allen belts.
      (ii) Setting up a moon base.
      (iii) Exploring the surface of the moon.
      (iv) Waiting in the command module.
   (c) When men spend long periods in space how will they protect themselves?
      (i) By taking special drugs.
      (ii) By wearing special suits.
      (iii) By using a protective blanket.
      (iv) No solution has been found yet.
   (d) Which of the following is true?
      (i) The grandchildren of astronauts are deformed.
      (ii) The children of astronauts have damaged sex organs.
      (iii) Radiation damage may show only in later generations.
      (iv) Radiation does not seem to be very harmful.
2. Choose the definition which best fits these words or phrases as they are used in the text.
   (a) Cosmic rays
      (i) Rays from outer space
      (ii) Sun beams
      (iii) Ultraviolet rays
      (iv) Rays from spacecraft
   (b) Scientists have reason to think _____
      (i) Scientists are right to think _____
      (ii) Scientists have evidence to suggest _____
      (iii) Scientists need to think _____
      (iv) Scientists are certain _____

(c) Get on
   (i) Mount (ii) Walk
   (iii) Survive (iv) Advance
(d) Turn out to be
   (i) Change (ii) Harm
   (iii) Remain (iv) Prove

3. Look at the passage and decide whether the following statements are 'true' or 'false':
   (a) The atmosphere screens off the Earth from excessive radiation.
   (b) Everyone on earth is exposed to exactly the same amount of radiation.
   (c) Solar flares are not dangerous.
   (d) Space is a dangerous place because it is not fully explored.
   (e) The 'Apollo 8' missions have been quite long in duration.
   (f) The drugs that have been found to decrease radiation are ineffective.
   (g) The greatest physical hazard to space travellers is remaining for long hours in space.
   (h) In space travel, space suits are absolutely necessary for the scientists.

Do it Yourself

I. Read the following passage and answer the questions given below.

The three-month period October to December is called the North-East monsoon period during which South Andhra Pradesh and Tamil Nadu get abundant rainfall. It is also the main cyclone period for the country.

During the above period, two or three low pressure cells keep forming every now and then in the South Bay. When atmospheric conditions become favourable, one of them concentrates into a well-marked 'low' and later into a 'depression'. The depression draws all the low level winds around it, the surface wind (SW) reaching 25 knots (one knot=1.85 kph). Almost invariably, in the next twenty-four hours, the depression concentrates into a 'deep depression' with SW of 30 knots. Long streaming thunder clouds in the form of spirals start converging towards the deep depression and are clearly seen in satellite photographs.

Roughly another day passes when the central region of the deep depression becomes a circular disc of dense overcast clouds, signifying the intensification of a deep depression into a 'cyclone'. With SW ranging from 35 to 50 knots, the sea becomes very rough and navigation is dangerous.

Again another 12 to 24 hours pass before a cyclone concentrates into a severe cyclone with SW of 55 knots. The sea becomes turbulent and large swells start pounding the adjacent coasts.

The place of origin of the cyclonic system and the duration of the sea travel before its landfall cause further intensification of a severe cyclone into a 'hurricane' with SW of 65 to 90 knots.

The weather satellite has made a big breakthrough in cyclone warning work. With geo-stationary satellites, visible photographs are taken during the day and infrared photographs are taken day and night. Facilities also exist to measure parameters like wind speed, direction and temperatures at different levels of the storm field.

While the satellites have a great role to play in detecting storms out in the sea, the radar has a greater role to play when the storm is approaching the coast. A network of cyclone detection radar exists along the Indian coasts. When cyclones are within 400 km range the radar can track them continuously.

1. State whether the following statements are true or false.
   (a) North-East monsoon period is the period of cyclones in South India.
   (b) A depression concentrates into a low.
   (c) Within 24 hours a depression intensifies into a cyclone.
   (d) As a depression becomes stronger, the surface winds also show an increase in their speeds.
   (e) During a depression it is dangerous for vessels to go into the sea.
2. Give short answers in not more than 15 words each.
   (a) Which factors decide the intensification of a severe cyclone into a hurricane?
   (b) What can be seen in a satellite photograph when a deep depression is formed?
   (c) Give the two types of photographs taken by weather satellites.
   (d) Apart from taking photographs which other measurements are made by weather satellites?
3. Give the meaning of the following as used in the passage.
   (a) Turbulent (b) Navigation
4. Complete the sentences suitably by adding not more than 15 words.
   (a) While radars are useful for tracking cyclones within 400 kms from the coast, _____
   (b) Not all low-pressure cells in the Bay _____
5. Choose the best alternative.
   (a) The correct increasing order of intensification is_____
      (i) Hurricane, cyclone, deep depression, depression.
      (ii) Depression, deep depression, cyclone, hurricane.
      (iii) Depression, deep depression, hurricane, cyclone.
      (iv) Deep depression, depression, cyclone, hurricane.
   (b) The surface wind speed of 25 knots during a deep depression is caused mainly by_____
      (i) atmospheric conditions (ii) thunder clouds
      (iii) gathering of low level winds (iv) dense overcast clouds

II. Read the given passage and answer the questions that follow. (Apr./May 2004)

The secrets of sleep were a mystery for centuries simply because there was neither the means to explore them, nor the need. Only when candles gave way to gas light and double his output by working shifts around the clock, did people seriously start wondering if sleep could be a waste of time. Our ability to switch night into day is very recent, and it is questionable if we will ever want, or be able, to give up our habit of enjoying a good night's sleep. However, a remarkable research project in London has already discovered a few people who actually enjoy insomnia. Even chronic insomniacs often get hours more sleep than they think. But, by placing electric contacts beside the eyes and on the head, it is possible to check their complaint by studying the tiny currents we generate which reveal the different brainwaves of sleep and wakefulness. This has shown that for some people seven or eight hours of sleep a night are quite unnecessary.

A lot of recent work has shown that too much sleep is bad for you, so that if you are fortunate enough to be born with a body which needs only a small amount of sleep, you may well be healthier and happier than someone who sleeps longer.

Every attempt to unravel the secrets of sleep and be precise about its function, raises many problems. The sleeper himself cannot tell what is going on and even when he wakes, has only a very hazy idea of how good or bad a night he has had. The research is expensive and often unpopular, as it inevitably involves working at night. Only in the last few years have experts come up with theories about the function of sleep and the laws which may govern it.

The real advance in sleep research came in 1937 with the use of the electroencephalogram. This machine showed small 50 microvolt changes in the brain, so, for the first time, we could observe sleep from moment to moment. Before that time one could put the person to bed, watch him mumble, toss, turn, bring back a few rough memories of dreams, and that was about all. In 1937 it was possible to read out these changes, second by second. Then in 1959 two other things happened. Kleitman and Aserinsky, as they were looking at eye movements, trying to understand the brainwaves, noticed that after about ninety minutes there would be a burst of the EEG, as if the person was awake, and the eyes would move rapidly. It was not hard to guess that it was a dream. And indeed it was. Waking people up during that period, they found they were dreaming; waking them up at other periods, they found no dreams.

The electroencephalograph shows that when we fall asleep we pass through a cycle of sleep stages. At the onset of sleep, the cycle lasts about ninety minutes during which you pass through stages one, two and three to stage four. This deepest form of sleep, and from it you retreat to stage two, and from there into REM, or rapid eye movement sleep. Here, for ten minutes on the first cycle and then gradually longer, it is thought that we do most of our dreaming.

Studies of people who volunteered to be locked up for weeks in an observation chamber with no idea of whether it is night or day, give remarkable results. We are not in fact, 24 hour creatures. Put people in such circumstances and even though the patterns of sleep continue, the day is extended to about 251/2 hours. Without any clues to time, these people go to sleep the first night about an hour later than usual, the next night an hour later, and the next night. So that, after about ten days, the person is going to sleep at three o'clock in the afternoon, thinking that he is still going to sleep at midnight.

Today, jet-lag is a familiar hazard for the seasoned traveller. Travel across time zones plays havoc with the biological clock rhythm of the human body. For the active pilot, who is rarely in one place enough to know if it is time for breakfast or dinner, the impact of jet-lag on his sleep is critical. Several air disasters have been partly caused by overtired pilots ignoring the natural laws of sleep. Much research is directed to finding out what these laws are and to what extent pilots and astronauts dare disobey them. But they are laws which affect all of us, and not just pilots.

1. Choose the response which best reflects the meaning of the text.
   (a) Only after the invention of electricity did people start
      (i) to really enjoy insomnia.
      (ii) asking themselves if sleep was a waste of time.
      (iii) to need to do research into sleep.
      (iv) giving up the habit of sleeping so much.
   (b) It seems that most people
      (i) need a lot of sleep.
      (ii) sleep too much.
      (iii) need less sleep than we thought.
      (iv) need more sleep than we thought.
   (c) The electroencephalograph records
      (i) eye movements.
      (ii) the frequency of dreams.
      (iii) the time it takes to have a dream.
      (iv) small currents in the brain.

(d) Dreams seem to be associated with
  (i) deep sleep.
  (ii) rapid eye movements.
  (iii) jet-lag.
  (iv) overtiredness.

(e) The people in the observation chamber
  (i) went to sleep an hour earlier than usual each night.
  (ii) started to go to bed in the afternoon.
  (iii) slept for a much longer period than usual.
  (iv) went to sleep about an hour later than usual.

(f) Jet-lag means
  (i) being unable to sleep properly on aeroplanes.
  (ii) the clock says it is one time the body says it is another.
  (iii) it is a different time in different parts of the world.
  (iv) prolonging the day from 24 hours to 241/2 hours.

2. State whether the following statements are true or false.
  (a) People who suffer from insomnia often get much more sleep than they imagine.
  (b) Research into sleep is now quite easy.
  (c) When people dream, their eyes move.
  (d) The cycle of sleep-stages lasts ten minutes.

3. Choose the definition which best fits these words or phrases as they are used in the text:
  (a) Gave way
    (i) were rejected in favour of
    (ii) gradually replaced
    (iii) were replaced by
    (iv) came back into use after
  (b) Which of the following is <u>not</u> a suitable alternative for convert? (1st paragraph)
    (i) change
    (ii) turn
    (iii) alter
    (iv) transform
  (c) Unravel
    (i) disentangle
    (ii) disrupt
    (iii) disturb
    (iv) discredit
  (d) Seasoned traveller
    (i) someone who travels at certain times of the year only
    (ii) someone who is accustomed to travelling
    (iii) someone who does not like travelling
    (iv) someone who suffers from travelling
  (e) Impact
    (i) result
    (ii) loss
    (iii) effect
    (iv) cause

(f) Clues
  (i) clockwork
  (ii) certainty
  (iii) assistance
  (iv) information

III. Read the following passage carefully and answer the question that follow it. (Nov./Dec. 2004)

Three great challenges dominate the scene as one contemplates the global environmental campaigning in the first few decades of the 21st century. First, there is huge legacy of industrial pollution which is not being responded to second, societies can live and work cleanly and sensitively but the means to do so are neglected. And third, governments are failing to organise politics and policies to protect public goods.

The first of these is a failure to respond to and deal with the pollution *legacy* of the 20th century, and in particular global warming which is leading to climate change. Disruption of the world's climate is already having *catastrophic* consequences for human and ecological well-being. While the International Climate Convention was signed at the Rio Earth summit in 1992 and although some progress has been made, effective action has not yet been agreed on, either in terms of targets or timetables.

The appropriate response to climate change is not *mitigation* or adaptation measures such as planting trees in the hope (not very well-founded) that they will mop up carbon dioxide or even constructing flood shelters for low-lying villages (though that is necessary). The appropriate response is to shift our energy economies rapidly out of fossil fuels and into renewable energy. It will be necessary to make *extensive* use of energy efficiency to make this task feasible in the necessary timescale.

The appropriate timescale is the time available to us before climate warming goes too far before it reaches the upper limit of a rise of around 0.2 degree Celsius per decade beyond which United Nations advisors anticipate that unpredictable and drastic ecological damage will *ensue*. (By Greenpeace calculations this is a matter of a few decades, although evidence from coral reefs and the Arctic and from the increasing extreme weather conditions now suggest that dramatic change is indeed underway). All nations need to make this switch and obviously industrial nations have a proportionately greater responsibility to act first. It is the World's number one environmental concern.

1. Say whether the following statements are true or false.
   (a) The legacy of industrial pollution is being dealt with concern by the government.
   (b) We need to rapidly shift to alternative and clean forms of energy sources.
   (c) Targets have been set for effective action to deal with the problem of pollution.
   (d) The well-being of human beings is being affected due to environmental pollution.
2. Choose the word that comes closest to mean the words or phrases as they are used in the text.
   (a) Catastrophic
     (i) disastrous
     (ii) important
     (iii) far-reaching
     (iv) sudden
   (b) Mitigation
     (i) lessening
     (ii) increasing
     (iii) shift
     (iv) investigation

(c) Legacy
  (i) inheritance
  (ii) problem
  (iii) responsibility
  (iv) ignorance

(d) Extensive
  (i) widespread
  (ii) appropriate
  (iii) careful
  (iv) necessary

3. Choose the response that best reflects the meaning of the text.

(a) One of the alarming effects of global warming is
  (i) damage of coral reefs.
  (ii) great climatic changes leading to adverse effects on man's health.
  (iii) worldwide pollution.
  (iv) worldwide floods.

(b) Appropriate timescale is
  (i) the lifespan of an average human being.
  (ii) the time it takes for complete ecological destruction.
  (iii) the time that man has taken to pollute the environment.
  (iv) the time that has been given to man before which he must tackle the problem of pollution.

(c) Countries all over the world need to shift to renewable sources of energy but ones that need to shift immediately are:
  (i) developing countries.
  (ii) countries that rely heavily on industries.
  (iii) prosperous countries.
  (iv) countries where fossil fuels are available in plenty.

(d) The best manner in which climate change can be addressed is by
  (i) planting trees.
  (ii) constructing flood shelters.
  (iii) shifting to renewable sources of energy cleaning the oceans.

CHAPTER

35

Note-taking–Guided and Unguided

How to Make Notes?

Note-making involves the ability to

1. identify the key items or the main points in a given text.
2. reduce or condense the main points in a given text.
3. organise the condensed information and represent it in a systematic way.

When Making Notes

1. First read the passage / essay / article once quickly.
2. Note only the most important information.
3. Condense the information before you write.
4. Omit examples and illustrations. You may include them if they are very important.
5. Organise the condensed information in a suitable format. Depending on the contents of the passage / article/essay, choose suitable format.
6. Use only phrases.
7. Select a suitable title and write it at the top of the note.

CONDENSING INFORMATION

Example

Four Indian Peace Keeping Force personnel were killed in a blast caused by a land mine =4 IPKF men killed in mine blast.

1. The figure 'four' is substituted by its corresponding number '4'.
2. The long phrase 'Indian Peace Keeping Force' is substituted by the abbreviation IPKF.

The long word personnel is substituted by a short word 'men'.

The passive verb 'were killed' is substituted by just the past participle form 'killed'.

The long noun phrase 'blast cause by a land mine' is condensed into a shortened one 'mine blast'.

The article 'a' is omitted.

INFORMATION IS CONDENSED

1. By using numbers instead of figures
   Thus
   Five is expressed as 5
   Thirty seven is expressed as 37
   A hundred is expressed as 100
   But
   A lakh is expressed as a lakh, and not 1,00,000
   A million is expressed as a million, and not 1,000,000
2. By using short substitutes for long words

e.g.	**Short word**	**Long word**
	men	personnel
	cop	policeman
	cut	reduction
	hike	increase
	stir	strike / agitation
	move	attempt
	ban	prohibit
	poll	election
	probe	investigation / enquiry

3. By using Reduced Verb forms
   (a) By using past participle form to convey the passive meaning

e.g.	killed	instead of	were killed
	stabbed	"	was/were stabbed
	arrested	"	was/were arrested

   (b) By using the 'to-infinitive' to indicate future time
   e.g. 'Haryana to free aged life convicts' to mean that the Haryana Government will free aged life convicts.
4. By using Abbreviations and Acronyms

e.g.		
	AIDS	Acquired Immune Deficiency Syndrome
	LTTE	Liberation Tigers of Tamil Elam
	IA	Indian Airlines
	PM	Prime Minister, etc.

5. By using Abbreviations of words
   e.g. Medicos medical students
6. By using only the first few letters of the word

e.g.		
	Technical	tech.
	Abbreviation	abbr.
	Figure	fig.
	Examination	exam.
	Representative	rep.

7. By using the first few letters and the last letter to avoid ambiguity. This technique is useful when the first few letters alone may create ambiguity
   e.g. Government govt.
   Department dept.
   Engineer engr.
8. By dropping all or most of the vowels in the word
   e.g. Management mngmnt.
   Develop dvlp.
   Possible possbl.
   External extnl.
   Technique technq.
9. By using symbols
   e.g.
   (a) = to mean equal to/equals/the same as/is synonymous with/is equivalent to
   (b) # to mean not equal to/not the same as/not equivalent to
   (c) _____ to mean leads to/in the direction of/towards/results in
   (d) / to mean therefore/as a result/so/for that reason/it follows that
   (e) + to mean added with/coupled with/and together with
   (f) —— to mean without
10. By using short Noun phrases instead of long phrases

Examples

(a) Car bomb blast instead of 'a blast caused by a bomb that was planted in a car'.
(b) Subsidised food grain instead of 'a scheme to provide food grain at subsidised rates'.
(c) Aged life convicts instead of 'convicts who have been sentenced to life imprisonment and are aged'.
(d) Mine blast instead of 'blast caused by explosion of a mine'.

EXERCISE I

I. Read the following passage and make notes on it.

ANAESTHETICS : PAIN KILLING DRUGS

Anaesthetics are drugs causing unconsciousness or insensibility to pain. Their use in modern medicine permits painless surgery during the simplest operation of a few minutes' duration, to the most delicate operation lasting many hours.

Anaesthetics are divided into two broad groups. General anaesthetics and local anaesthetics. General anaesthetics can cause total unconsciousness in the patient by temporarily altering the normal activities of the central nervous system. Local anaesthetics temporarily deaden sensation on a particular, or local, area of the body.

General anaesthetics are usually administered to the patient in one of two ways; inhalation or intravenous injection. In the inhalation method the patient breathes a gas or vapour into his lungs. In the intravenous injection the drug is put directly into a vein.

Two drugs often used as general anaesthetics in operations of short duration are the liquids vinethene, which causes rapid anaesthesia and trilene, which produces a light, pain-killing effect. Trilene is usually combined with nitrous oxide and oxygen.

Not all surgery requires that the patient be unconscious. For minor operations, only restricted, or local area of the body need be made insensible to pain; thus a local anaesthetic is administered. The local anaesthetic prevents sensations of pain from travelling through the nerves in the drugged area.

Local anaesthesia can be produced through three sites of injection. Infiltration is the injection of the drug into the tissues. Block anaesthesia is produced by the injection of the drug around the main nerves leading to the operation area. These main nerves are blocked from transmitting sensory impulses. Spinal anaesthesia results from the injection of the drug into the space surrounding the spinal cord.

ANSWER

ANAESTHETICS: PAIN KILLING DRUGS

1. Anaesthetics
   - 1.1 Drugs causing
     - 1.1.1 unconsciousness
     - 1.1.2 insensibility to pain
   - 1.2. Used for painless surgery
2. 2 Grps
   - 2.1 Gen. Anaesthetics – cause total unconsciousness
   - 2.2 Local anaesthetics – deaden sensation
3. 2 ways of admnstrng
   - 3.1 Patient – breathes gas vapour
   - 3.2 Injected – intravenously
4. Local ansthic
   - 4.1 Used for minor operations
   - 4.2 Prvnts pain sensations
   - 4.3 Produced through 3 injection sites
     - 4.3.1 infiltration – into tissues
     - 4.3.2 block Anaesthesia - around main nerves
     - 4.3.3 spinal Anaesthesia- injection into spinal cord

EXERCISE II

II. Read the following passage and make notes on it.

THE ADMAN'S TASK

The ultimate aim of all advertising is to sell the commodity but in order to achieve this there are a few obstacles which the adman has to overcome. First of all, prospective buyers are likely to be reading the newspaper or magazine not because of its advertising material but because of its editorial material; moreover, round about half of the publication is likely to consist of adverts, all of them competing for the reader's attention. The first task of the adman, then is to make sure that his advert is noticed. Once the reader's attention has been caught, the advert should also hold his attention and it should convince him that the subject of this particular advert is of interest to him. Furthermore, the advert has to convince the reader that the commodity will satisfy some need or create a need which he has not felt before. Finally, it is not enough that the prospective customer should come to feel a need for the product in general; the advert must convince him that the particular brand advertised has some qualities which will make it superior to other similar brands. In addition, the ideal advert should be constructed in such a way that as much as possible of its message will get across even to the reader who merely notices it but decides not to read it.

ANSWER

THE ADMAN'S TASK

THE ADMAN'S TASK

1. Aim of advtsng – to sell commodity
2. Advt. should
   - 2.1 Ensure adv. noticed
   - 2.2 Hold reader's attention
   - 2.3 Convince that
     - 2.3.1 Sub of particular adv. concerns him
     - 2.3.2 Commodity will
       - 2.3.2.1 satisfy some need
       - 2.3.2.2 create a need unfelt before
     - 2.3.3 Advertised brand is superior to other brands
   - 2.4 Put message across even to uninterested reader

EXERCISE III

III. Read the following passage and make notes on it.

LINE ORGANISATION

A line organisation is one in which there is a direct flow of authority from the top executive to the rank and file employee, usually through several lesser executives at various managerial levels. It is sometimes called the military type because each person has someone immediately over him. Although modern armies have become too complex to rely exclusively on a line organisation, they still use the direct chain of command.

There are many advantages inherent in this form. It is simple and easy to understand. Responsibility is clearly defined and each worker, regardless of his rank, reports to but one individual. This simplifies discipline. Decisions can usually be rendered quickly and executives must produce or be replaced. As long as each employee carries out the orders of his immediate superior, he is relatively free from criticism, which makes for harmonious working conditions.

There are, however, many disadvantages to the line type of organisation. Each superior needs to be a master of many diverse angles to his job. He should be able to handle his men, keep the machines running, invent new processes, recommend pay increases and train new employees. Frequently he may be outstanding at one or two of his numerous responsibilities and very poor at others. The line organisation also has the disadvantage of placing so much final authority and direction at the top that the individual concerned, instead of devoting his attention to working out important matters of policy and general practices, finds most of his time devoted to reading reports and rendering decisions on operating problems. Coordination of the different 'lines' is difficult to achieve, particularly in a complex, large-scale industry.

ANSWER

LINE ORGANISATION

1. Line Organisation
   Authority flowing directly from top executive to last employee through several lesser executives.
2. Advantages
   - 2.1 Simple and easy to understand
   - 2.2 Responsibility clearly defined
   - 2.3 Each worker reporting to one individual
     - 2.3.1 Discipline simplified
   - 2.4 Decisions rendered quickly
   - 2.5 Each employee obeying immediate superior
     - 2.5.1 Relatively free from criticism
     - 2.5.2 Making for harmonious working condition
3. Disadvantages
   - 3.1 Each superior to be master of diverse angles
   - 3.2 Should be able to
     - 3.2.1 Handle men
     - 3.2.2 Keep machines running
     - 3.2.3 Invent new processes
     - 3.2.4 Recommend pay increase
     - 3.2.5 Train new employees
   - 3.3 Outstanding at some responsibilities and very poor at others
   - 3.4 Final authority and direction placed at the top so much that
     - 3.4.1 The individual concerned devoting most of his time to reading reports and rendering decisions on operating problems
   - 3.5 Co-ordination of different lines difficult to achieve in a complex, large-scale industry

EXERCISE IV

IV. Read the following passage and make notes on it.

STAGES OF MAN'S EVOLUTION

Man, at first, seemed to have no very promising outlook in the general struggle for existence. He was still a rare species, less agile than the monkey in climbing trees to escape from wild beasts, almost destitute, no natural protection against cold in the way of fur, hampered by his long infancy, and with difficulty securing food in competition with other species. His only initial advantage was his brain. Gradually, this one advantage proved cumulative and transformed him from a hunted fugitive into the Lord of the Earth. The early steps in this process are pre-historic and their order is conjectural. He learned to tame fire, which had presented dangers similar in kind, though less in degree, to those of the release of nuclear energy in our own day Fire not only improved his food, but by being kept burning at the mouth of his cave ensured his safety while he slept. He invented spears and bows and arrows. He dug concealed pits in which infuriated mammoths hopelessly struggled. He domesticated animals. And at the dawn of history discovered the uses of agriculture.

ANSWER

STAGES OF MAN'S EVOLUTION

1. Condition of earliest man
   (a) A rare species
   (b) Been struggle for existence
   (c) Disadvantaged in competition for survival
2. Disadvantages
   (a) Not agile - easily hunted by wild animals
   (b) No natural protection against weather
   (c) Long infancy - chances for death or being killed more
   (d) Difficulty in securing food - uneven competition with more powerful animals
3. One initial advantage: Brain
4. Progressive use of brain in
   (a) Use of fire
      (i) for better food
      (ii) for protection against wild animals
   (b) Invention of weapons
      (i) spear
      (ii) bow and arrow
   (c) Digging concealed pits to trap angry mammoths
   (d) Domesticating animals
   (e) Use of agriculture
5. Cumulative progress making man Lord of the Earth

EXERCISE V

V. Read the following passage and make notes on it.

CREATIVE ACTIVITY

I would say that there is a physiological need, in living matter, to create. The laws of nature are such that nature is running down all the time, things are becoming disorderly all the time and living matter is constantly opposed to this. It is constantly trying to create order. The word 'Creation' means "the creation of order", the finding in nature of links, of likeness, of hidden patterns which the living thing—the plant, the animals, the human mind—picks out and arranges.

To my mind, it is a mistake to think of creative activity as something unusual. I hold that the creative activity is normal to all living things. Creation is the finding of order in what was disorderly and this is a characteristically human activity.

So I would say that the ability to work creatively in more fields than one is a historical accident, which pertains to some people who have had, by chance or by the nature of their environment, the skill needed in several fields.

ANSWER

CREATIVE ACTIVITY

1. Creative activity
   (a) A natural impulse of living things
   (b) For creation of order
2. Creative activity a physiological need
   (a) In nature things always run down
   (b) Things become disorderly
   (c) Living things opposed to disorder & running down of things
3. For creating order, need to find in nature
   (a) Links
   (b) Likeness
   (c) Hidden patterns
4. Creative activity
   (a) Normal to all living things
   (b) "Typical human activity"
5. Possible in more than one field
6. Skill for creative activity in many fields had by a few
   (a) By chance
   (b) By the nature of their environment
7. Such activity a historical accident.

CHAPTER

36 Jumbled Sentences

Rewrite the following jumbled sentences in the correct order.

Examples

I

1. At first it was thought that water supply could be delivered through centralised pumping systems.
2. Their conclusion was that the most feasible option would be the use of ground water and handpumps.
3. But when the global cost estimates ranged as high as US $ 600 billion, planners started to think about other cheaper and more practical options.
4. This had the specific objective of providing clean drinking water to every person around the globe by 1990.

Answer

4. This had the specific objective of providing clean drinking water to every person around the globe by 1990.
1. At first it was thought that water supply could be delivered through centralised pumping systems.
3. But when the global cost estimates ranged as high as US $ 600 billion, planners started to think about other cheaper and more practical options.
2. Their conclusion was that the most feasible option would be the use of ground water and handpumps.

II

The Egyptians knew the art of jewellery-making as early as 3000 BC.

1. It is malleable and we can, therefore, change its shape by pressing and hammering.
2. It has been accepted by the nations of the world as a medium of international exchange.
3. It is also ductile; this means that we can draw it out into a wire.
4. In ancient India, too, exquisite gold ornaments were made by skilled craftspeople.
5. Although we do not use gold for coinage nowadays, there was a time when gold coins were in use. The Greeks developed the art of coin-making to a high degree of skill.
6. Gold is important for another reason.
7. Gold possesses two properties which make it easy for the artisan to work on.

Answer

The Egyptians knew the art of jewellery-making as early as 3000 BC.

4. In ancient India, too, exquisite gold ornaments were made by skilled craftspeople.
6. Gold is important for another reason.
2. It has been accepted by the nations of the world as a medium of international exchange.
5. Although we do not use gold for coinage nowadays, there was a time when gold coins were in use. The Greeks developed the art of coin-making to a high degree of skill.

7. Gold possesses two properties which make it easy for the artisan to work one.
1. It is malleable and we can, therefore, change its shape by pressing and hammering.
3. It is also ductile; this means that we can draw it out into a wire.

III

1. If that strikes oil, then production wells can be drilled.
2. They carry out surveys from the ground and from the air using a variety of instruments, and they bore into the rocks to take samples.
3. When petroleum engineers search for oil, they look for certain types of rock layers, or strata, which they know from past experience can trap oil.
4. If it indicates that oil may be present, a test well is drilled.
5. Oil is found underground trapped in the layers of rock.
6. When all the information is collected and analysed, a picture of the underground strata is obtained.
7. They also set off explosions in the ground and record the waves reflected from the underground rock layers.
8. This is called seismic surveying.

Answer

5. Oil is found underground trapped in the layers of rock.
3. When petroleum engineers search for oil, they look for certain types of rock layers, or strata, which they know from past experience can trap oil.
2. They carry out surveys from the ground and from the air using a variety of instruments, and they bore into the rocks to take samples.
6. When all the information is collected and analysed, a picture of the underground strata is obtained.
7. They also set off explosions in the ground and record the waves reflected from the under ground rock layers.
4. If it indicates that oil may be present, a test well is drilled.
1. If that strikes oil, then production wells can be drilled.
8. This is called seismic surveying.

EXERCISE

Rewrite the following jumbled sentences in the correct order. (Nov./Dec.2002)

I

1. In the long term, certain chemicals in tobacco smoke intensify the damage in the lung region.
2. But, giving up smoking progressively reduces such risks of lung cancer.
3. Consequently, the mucus remains and starts accumulating in the lungs, making them liable to infection.
4. However, without any doubt it can be said that smoking is injurious to health.
5. The damage caused to the lungs and respiratory passages inhibits the process that removes mucus and dust particles.
6. There is an overwhelming statistical and experimental evidence to associate smoking with diseases like lung cancer and coronary heart attacks.
7. This, in turn, induces cancer in the lung tissues.
8. Apart from early death from these two diseases, heavy smokers suffer from persistent coughs which damage the lungs.

II. (Nov./Dec.2002)

1. Another disadvantage is that diesel engines are difficult to start in cold weather.
2. For one, the higher compression that makes the diesel more efficient necessitates the use of heavier engine components.
3. Thirdly, diesel engines have been noted for their loud noise and vibration.
4. However, the popularity of diesel engines still continues, because the price of diesel is low when compared to the price of petrol.
5. Finally, these engines are known for the emission of heavy smoke.
6. The diesel engine, an increasingly popular engine in automobiles has its own disadvantages.
7. But, plugs are available to preheat the engines to provide easier starting.
8. Therefore, diesel engines remain heavier than petrol engines.

III. (Apr./May 2003)

1. The dissolved cellulose is formed into threads by a technical process.
2. This fibre is, in fact, a reconstituted natural fibre.
3. After that, they are dried on a heated roller.
4. The cellulose is obtained from shredded wood pulp.
5. Finally, they are wound on to a bobbin.
6. It is made by dissolving cellulose in a solution of sodium hydroxide.
7. The threads are drawn from the setting bath of dilute sulphuric acid. Then, they are wound on reel and washed.
8. Rayon is a man-made fibre.

IV. (Apr./May 2003)

1. Antarctica which is regarded as a continent by itself is located in this southern polar region.
2. Geographers have found that there are some important differences between the northern and southern polar regions of the earth.
3. Antarctica is snow-bound almost throughout the year, but the snow in the Arctic melts in summer.
4. The Arctic region, in the north, is mostly sea, surrounded by masses of land.
5. But, on the whole, both the polar regions help nature, in maintaining the ecological balance.
6. The southern pole, on the other hand, is situated in a land mass surrounded by oceans.
7. Both the regions, in general, have very cold climate.
8. The winter in the Arctic is not so severe as in the Antarctic.

PART IV

Writing

CHAPTER

37

Characteristics of Technical Style

TECHNICAL WRITING

Technical writing is communication, the primary aim of which is to convey a particular piece of information to a particular audience for a particular purpose. It is often exposition about scientific subjects, and various technical subjects associated with sciences. Technical writing is "translating technical ideas into words that a specific audience will understand." Audience analysis is thus a key feature of all technical writing. Technical writing is "a translation of complex technical concepts into simple language intended to enable a specific user to perform a specific task in a specific way." Technical writing is usually done by a technical writer.

Effective communications requires quality content, language, format, and more. To present the appropriate content, it is imperative to understand one's audience and writing purpose. If the informational medium does not communicate the information that the writer/designer intends and what he or she wants the audience to understand, then the communication is meaningless.

A "TECHNICAL" APPROACH TO WRITING

How one writes is as important as *what* one writes. Language itself is important to enable readers to understand and believe the written text. Language affects a reader's ability to comprehend and assimilate what a writer is presenting. Furthermore, people can, and frequently do, judge things by outward appearances; it is essential to make good impressions when communicating in a business setting. When one communicates (whether writing, giving a speech, or talking on the telephone), information must be presented effectively, consistently and, to a large degree, attractively. These elements strongly affect perceived writer and organizational credibility and professionalism — highly sought-after commodities for individual and organizational success.

Format, organization, and style are important in that they make information available, accessible, and readable. Format, and the like, is the "how" of a written presentation. A central tenet of technical writing is that the more likely the reader is to need to see a piece of information, the more accessible it should be made to the reader. Illustrations are an essential part of technical writing, as are proper uses of natural metaphor.

Format choices not only aid understanding, but they also give a document the highly sought-after technical or business "look" that organizations strive or hope for. The technical writer's main role is to inform, to instruct, to persuade, to inspire and to involve the audience with the information.

DEFINITIONS

There are many definitions of technical writing. It has been seen as its own species of business writing. Technical writing is a specialized, structured way of writing, in which information is presented in a format and manner that best suits the cognitive and psychological needs of the readers, so they can respond to a document as its author intended, and achieve the purpose related to that document. Technical writing is writing formatted

and shaped to make reading and understanding as simple, poignant, unequivocal, and enjoyable as possible (i.e., "user friendly"). The competent technical writer continuously asks: "What does the audience know, and what do they need to know, and in what order do they need to know it?"

Precision in technical writing is critical because if anything is described incorrectly, readers may act improperly on what is said, causing mistakes, and problems at work. Society for Technical Communication is probably the largest technical writing association. The STC defines technical communication as "The process of gathering information from experts and presenting it to an audience in a clear, easily understandable form". They add: "Technical writing and editing is an umbrella term for any sort of professional communication. It's the interface between your ideas and the rest of the world."

Other Definitions

"Technical writing is the presentation of information that helps the reader solve a particular problem. Technical communicators write, design, and/or edit proposals, manuals, web pages, lab reports, newsletters, and many other kinds of professional documents."

"The transfer of specialized information from subject matter experts to those who need to use it."

A technical report has the following sequence:

1. Cover
2. Title page
3. Acknowledgements
4. Table of contents
5. Abstract and summary
6. Introduction
7. Discussion or description
8. Conclusions
9. Recommendations
10. Appendix
11. List of references
12. Bibliography
13. Glossary
14. Index

Cover

To protect the manuscript against damage, a report is usually bound in a cover. A neat and attractive cover gives a report a professional look. It should contain only essential information, namely, the report number and its classification if any, name of the organisation, title of the report, name of the author and the date.

Title Page

It is the first right-hand page of the report. In addition to all the information in the cover it contains the following: project or job number, if any, the name and designation of the primary recipient, approvals and distribution list, if necessary.

Acknowledgements

It is necessary to acknowledge any help, assistance or guidance received from different persons or organisations. In doing so you should be sincere and courteous and have a variety in your expressions. A few commonly used expressions are given below:

(i) We thank…
(ii) We are grateful…
(iii) We are indebted…
(iv) We are highly obliged to…
(v) Thanks are due to …
(vi) We are particularly grateful…
(vii) We should like to thank, etc. …

The reasons for thanking the person or persons are also stated. For example, 'we are grateful to Mr. John for his useful guidance, etc.

Table of Contents

The main function of the table of contents is to help the reader locate specific material in your report. For proper organisation you should follow the decimal numbering system in listing the topics and sub-topics.

Abstract and Summary

An abstract is a clear, concise condensation of the purpose and the most important results of the project. It states what the report is all about, what has been accomplished and the significance of the achievement. A summary on the other hand is the entire report in a nutshell. It has a beginning, stating why the project was carried out and why the report was written; a middle, highlighting the most important features of the report and an end giving conclusions and recommendations.

Introduction

An introduction states the subject and the purpose of the project, gives the background, describes the basic procedure or methods followed for the collection of data and their sources, defines scope pointing out the limitations or qualifications of the project; and indicates the value or importance of the project.

Discussion or Description

The function of this element is to discuss or describe the main business of the report. It naturally therefore contains the data in an organised form, often in tables, which are analysed. These are then evaluated and judgements are formed and they ultimately lead to the formulation of conclusions.

Conclusions

To give a sense of finality and completeness to the discussion or description, it is a common practice to make certain remarks at the end of a piece of writing. Their function is merely to bring the discussion smoothly to a close, giving the reader a psychological assurance of having come to the end.

Recommendations

Recommendations, when given, are clearly derived from the conclusions and indicate future action, application of material, need for further investigation or proposed programme, etc.

Appendix

The appendix is a useful element of the report. Each appendix should be a separate unit and should be numbered as Appendix A, Appendix B, etc. The kinds of material that are generally included are as follows: derivations of equations, detailed calculations, copies of exhibits, data sheets, questionnaires used in the investigation, list of questions used for interview, sample of forms, detailed descriptions of equipment or procedure, tables and figures which would not conveniently fit into the body of the report, etc.

List of References

If you have used or quoted in your report matter from any published or unpublished source, you should give credit to the author (s) concerned by citing them in the text and listing them at the end of your report. This list is known as the list of references. The entries in the list with full bibliographical details are made in the alphabetical order or in order of citation in the text.

Bibliography

A bibliography is a list of sources consulted. It is serially numbered and the entries in it are made in the alphabetical order. The details appear in the same sequence as in the list of references.

Glossary

A glossary is a list of technical words or terms used by the reporter in a special sense. The sole purpose of a glossary is to help the reader understand clearly what you say in the report.

Index

An index helps the reader locate a topic or a sub-topic or any other material easily. The entries in the index are arranged in an alphabetical order and are cross referenced.

(Source: Krishna Mohan and Meera Banerji : *Developing Communication Skills,* pp.83,99.)

CHAPTER

38

Paragraph Writing

A Paragraph is a number of sentences grouped together and relating to one topic, or a group of related sentences that develop a single idea. In other words, it is a group of sentences, all of which focus on a single subject. It is the smallest unit of prose composition. Letters, essays, stories, chapters in books, etc. are divided into paragraphs on this basis. A Paragraph is thus a distinctive unit in all prose writings, usually marked by an indentation of the first line. A good paragraph makes clear the meaning of one particular idea or topic by elaborating, elucidating or illustrating with examples.

By arranging words or phrases in a specific way we control the meaning of a sentence. Similarly, by sequencing the sentences in a particular way, we organize a paragraph on one main idea. The sequencing of words results in a complete change in the meaning. Likewise, the arrangement of sentences decides the meaning of a paragraph.

LENGTH OF A PARAGRAPH

There is no rule as to the length of a paragraph. It may be long or short; sometimes as long as a page or more, and sometimes as short as a sentence or two for the development of the particular point it deals with. But it may be a good idea for the beginners to avoid both these extremes and restrict the length of the paragraph to about three to eight sentences.

The Format of the Paragraph

The basic requirements of a Paragraph are

1. **Unity:** The most striking feature of a paragraph is its unity, that is, the discussion or description of one theme, subject or topic termed as the core idea of the paragraph. Just as each sentence deals with one thought,each paragraph must deal with one topic or idea. Every section in the paragraph must be connected with the main topic of the paragraph. The paragraph and every part of it must be the expression of one theme or topic.
2. **The Topic Sentence**: Usually in a paragraph one sentence contains the core or central idea. This sentence is called the topic sentence, because it introduces the topic. The rest of the sentences of the paragraph relate to the topic sentence in one of the following ways:
   a. lead into / upto it.
   b. explain it, by either expanding or limiting its meaning
   c. Support it
   d. Support or explain one of the supporting sentences.
3. **Coherence**: A true paragraph is not just a set of sentences put together but sentences which are interlinked with each other. This interlinking provides coherence to the paragraph. There are four significant devices to achieve this quality. They are pronouns, repetition of key words and phrases, synonyms and connectives or linking words. The following are the commonly used connectives:

i. Addition: and, against, besides, also, finally, in addition to, furthermore, moreover, next one, another, last
ii. Comparison and Contrast: however, but, yet, still, though, although, even though, nevertheless, nonetheless, in contrast, in spite of / despite, on the other hand
iii. Time: before, after, first, second, soon , till, by the time, then , later, next, afterwards, immediately
iv. Choice: or, either…or, neither…nor
v. Concession: although, granted, it is true that, naturally
vi. Purpose: so that, to this end, for this purpose
vii. Example: for example, for instance, to illustrate, such as , particularly, the following example
viii. Place: here, there, beyond, opposite to
ix. Result/ Effect: so, therefore, thus, consequently
x. Cause: for, because(of) , since
xi. Clarification: in other words
xii. Conclusion, Summary and Results: in summary, in conclusion, in other words, in short, in brief, to conclude, to sum up

4. **Variety :** To avoid monotony, the paragraph of a composition should be of different lengths, and not always of the same sentence structure. The sentence patterns used in the paragraph must be varied. There should be long and short sentences, simple and complex, direct and involved, straightforward and inverted.
5. **Logical Sequence of thought or Adequate Development:** To contribute to the unity of the paragraph, the entire paragraph should emerge from or lead to the topic sentence. The topic sentence should be developed in an orderly manner. There are various techniques used to develop a paragraph.
   a. Listing: In writing, certain words or phrases are used to help the paragraph flow smoothly. For example, the first type is, the second is, the third is, finally it is
   b. Examples: A paragraph developed by example has the following parts: topic sentence and example sentences that restate the idea.
   c. Comparison: A paragraph developed by comparison compares similar aspects or qualities of two objects.
   d. Contrast: The comparative paragraph compares dissimilar aspects of two objects.
   e. Definition: A definition paragraph describes, explains or defines an unfamiliar term by relating that which is unknown to that which is already known. It makes use of the techniques of comparison, contrast and synthesis often in a combination.
   f. Classification: Such a paragraph classifies a subject matter by the paragraph writing techniques.
   g. Process description: This paragraph describes definite steps in a necessary order. It is similar to the procedure followed in conducting a scientific experiment.
   h. Cause and Effect: The stating of facts and the giving of reasons to explain why or how facts came about, is the basic procedure in paragraph development by cause and effect**.**
   i. Generalization: It is similar to paragraph development by example. The main purpose of paragraph developed by generalization is to convince the reader that one's conclusion is the only logical one.

Examples

1. **Human Language and Animal Language**

We generally think of language as the unique possession of human beings. Man is called a rational animal and language is the medium through which he reasons and speaks. Human civilisation has been made possible by language which has served as a vehicle for the transmission of knowledge from generation to generation.

Animals and birds too have their own means of communication. Animals can communicate different messages by their cries; pain, danger and aggression can be accompanied by different signals. When a tiger

approaches, deer send an alarm signal by their cry which warns other deers. Dogs have different ways of barking to communicate different messages. Birds signal to each other by song. The song pattern carries a different message.

It is the language of the bees that has struck scientists as the most remarkable. A bee which returns to the hive after scouting for honey, goes through a dance which communicates to the other bees the information about the location of the honey.

The language which the human beings use is also a form of communication. There are, however, some important differences between the two. First, the animal's language is restricted to a limited number of messages. Human language is not so limited. Man can generate an infinite number of messages. Secondly, animal language is controlled by or conditioned by the immediate situation. Only when the danger is present, the animal produces the message that indicates danger. It is in the presence of the danger that prompts the bird to voice the signal appropriate to the situation. In other words, a bird's message is inseparably linked to the present time and the immediate space around. Man's language is independent of the immediate situation. He can speak about the past and the future. He can tell lies and can invent stories. He can fantasise and speak about imaginary or impossible situations.

In short, human language is creative. Man can use language to speak about complex situations and communicate with himself and answer his own questions. Human language has changed and developed to meet complex needs of society. Man can even invent a language and teach a machine to understand such a language.

2. **Do you think that the introduction of computers in industries will lead to unemployment? Express your ideas in a paragraph of about 200 words.** (M.Q.P.)

A decade ago the most vehement opposition to computerisation came from people who believed that it would lead to unemployment. The hue and cry was based on the argument that computers would aggravate the unemployment situation by taking away jobs from human beings.

But now it is a different story. The unemployment is not a matter of too few jobs for too many people. There are many people without work and yet countless jobs that need to be done.

It has been established that the computerisation of an economy increases efficiency and productivity while bringing about savings in cost; funds are generated and additional employment is increased.

India's track record in the field of technology is now well-known. There is a great demand for software professionals from India. At the same time, there is a great deal of foreign investment in the technology sector.

Computers are now extensively employed in private and government sectors like banks, hotels, airlines, media and multinational business houses. Videsh Sanchar Nigam Limited (VSNL) supports infrastructure for most nationalised banks, small-scale industries and for the individual users as well. Many of these companies use networking systems like Wide Area Network (WAN) and Local Area Network (LAN) extensively.

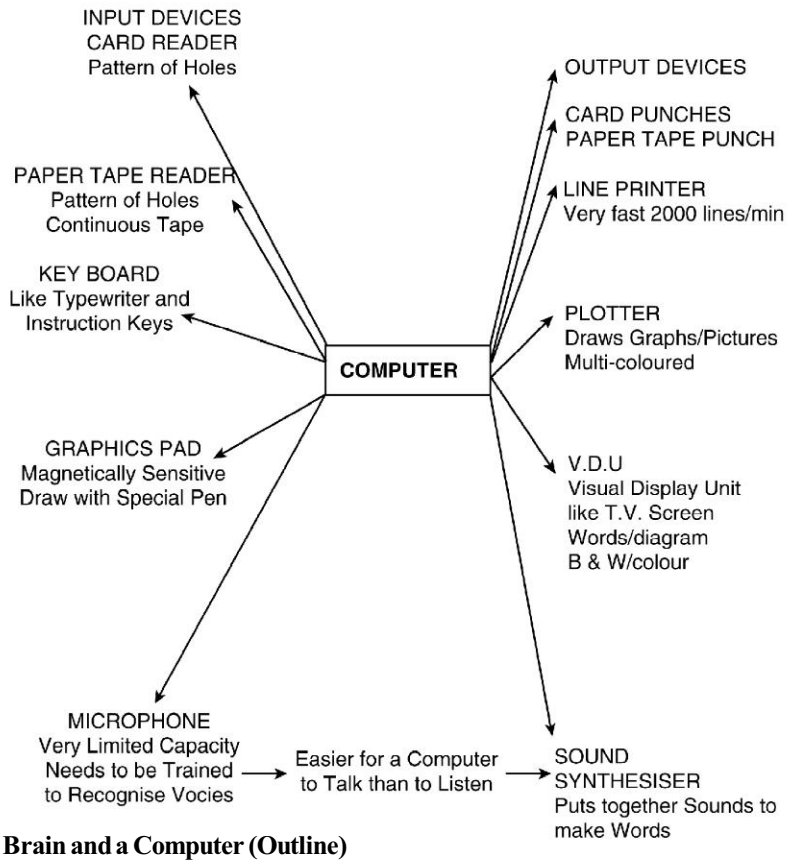
Nuclear and defence establishments use super computers to manage vast amount of data. Software packages are created for a particular kind of industry, tailored to meet their special needs.

Schools and other educational institutions have introduced computers as a subject. Private institutions that train students in programming are thriving because of the demand for more and more computer analysts and programmers. More than 70,000 computer professionals graduate every year.

The Indian IT industry is aggressively pursuing Internet and e-commerce opportunities. Indian firms design multimedia content for Hollywood animation movies. Technology parks have been set up in the metro cities because India is considered the top destination for software outsourcing.

The question is no longer whether computers are here to stay, but how much they contribute to the development of a country.Thus we see that there are countless opportunities for qualified computer personnel.

3. **Input and Output Devices (Outline)**



4. **The Human Brain and a Computer (Outline)**

	The human brain	A computer
Weight	about 1.5 kg	from a few grams to tons
Energy sources	blood glucose	electricity
Temperature needed	fairly steady	not very sensitive to change
No. of parts	approx. 10^{11}	approx. 10^{11}
Location of parts	inside skull	could even be in different countries
Memory	probably unlimited capacity	capacity limited by technology
Speed of calculation	slow compared to a computer	extremely fast

5. **Different Types of Technology**

Technology has been described by J. Bronowski as 'the sum total of all the different techniques by which man changes his environment'. It is the tool that man has been consistently employing over the ages to fulfil his needs and aspirations in life and to make his life more comfortable. The stone implement that primitive man used to kill animals is as much an instance of technology as the silicon chip of today which has revolutionised electronics.

Technology has been classified into different types such as simple technology, intermediate technology, high technology, appropriate technology and so forth.

Simple technology: This type of technology is primarily based on human labour. It involves the use of very few tools which are of the simplest variety. They cost nothing and are easy to operate. It means hard, slow and prolonged work. The use of a hoe for cultivation or weeding by a farmer is an example of simple technology.

High technology: Unlike simple technology, high technology is not labour intensive. Machines of sophisticated and complex types do most of the work. Naturally, these machines and their operation cost a great deal. Of course, high technology operating on a large scale is highly productive. Oil mills, ceramic plants, shoe factories and textile mills are all examples of high technology.

Intermediate technology: As the name itself implies, this type of technology stands halfway between simple and high technology in terms of its capital costs, sophistication and scale of operation. The ox-drawn plough can be cited as a good example of intermediate technology as it stands between the traditionally hand-operated hoe and the modern diesel tractor.

Appropriate technology: This is a kind of low-cost technology of the intermediate type. The accent here is on the appropriateness of the technology used in relation to the cultural and geographical circumstances of people. It arises from the local needs and uses local resources, both human and material. Its benefits go to the local community. It is linked with the concept of social justice. Pedal powered rice-threshers and gobar gas plants are very good examples of appropriate technology.

6. **Noise Pollution**

Noise is no less a pollutant than the toxic chemicals. Abnormally high noise levels not only impair the hearing but also create nervous and emotional tension leading to high blood pressure, cardiovascular diseases and other health problems.

A study conducted at London's Heathrow Airport has indicated a higher incidence of mental illness among those who lived in the neighbourhood compared with those outside the range of the aircraft din. According to a study in France, aircraft noise is the cause of 70 percent of the neuroses cases in Paris.

School children are among the worst victims of noise pollution, which causes a steep fall in concentration and loss of memory. "Sixty percent students in noise polluted areas fail to concentrate in the class. Forty percent suffer from hearing problems and number of them complain of headache problems and irritation", says Dr Surya Kant Mishra who conducted a study in schools located by the side of noisy streets and railway colonies in Kanpur.

Besides mental strain, noise can also cause restlessness and lack of communication. A survey by the Society for Clean Environment (SOCLEEN) revealed that noise pollution was constantly encountered by 36 percent of the population in Mumbai. Of them, 76 percent felt that noise resulted in lack of concentration, 69 percent complained of disturbed sleep and 65 percent of restlessness.

Prolonged exposure to a high level of noise results in Noise Induced Hearing Loss (NIHL), both temporary and permanent. According to a study, the highest incidence of NIHL was found in the foundry (40 percent) followed by the oil mill (32.7 percent), textile industry (32.6 percent), refinery (28.3 percent), fertiliser factory (19.8 percent) and a low of 8.1 percent in electric companies.

Unpleasant or even pleasant noise which is too loud may lead to severe cases of violent behaviour. An industrial survey in Chennai showed that in more than half of the industries, the agitating workers were from the "noisy section" of their respective industries.

Studies conducted in the Soviet Union (now the CIS) have also revealed that every decibel above the permissible level reduces labour efficiency by one percent and enhances the danger of hearing loss by 1.5 percent. In USA, at least eight percent workers are facing hearing problems due to prolonged exposure to noise. Though research in this field is in its infancy, random surveys are enough to send warning signals. The findings of a committee appointed by the Mumbai High Court to study the extent of noise pollution in Mumbai confirms the worst fears. "The average level of noise in the city ranging between 57 – 105 decibels is much higher than the level of 45 decibels (at night) and 55 decibels (during the day) recommended by the World Health Organisation".

The report said, "loudspeakers are the main source of noise. The other factors are road and rail traffic, aircraft and industrial units, shrill pressure horns and fire-crackers".

Mumbai, however, is not the only city suffering from the noise menace. The situation is equally bad in other metropolitan cities and the major industrial towns of the country.

(Source : News Today**,** 16 June 1987)

7. **Animals and Plants**

The first thing that strikes us about plants and animals is that animals can move about freely. Their bodies have nervous and muscular systems, which enable them to move from one spot to another. Plants on the other hand, are seen to be fixed to one spot. They do not move about by themselves. They are not capable of free spontaneous movement. This indeed is the most obvious difference.

But there are some exceptions: there are animals which do not move and there are plants which move about. There are many microscopic, single-celled plants, which are called "diatoms". They move about in fresh water or sea water. Likewise there are tiny animals which are attached to rocks and never move away from the rocks. These are the corals, which stay in one place during their lifetime. In the course of time they form coral reefs.

The second difference which all of us notice is that animals generally have a maximum size and a definite form. All elephants, for example, look like elephants, shall we say? Trees, on the other hand, grow to very large sizes and many of them can have different shapes even when they belong to the same species. Animals do not change after they become mature, after they have 'grown-up'. It is true that the shape of a coconut tree is different from that of a banyan tree; but if you look at different banyan trees you will see that they have different branching patterns.

The next difference relates to food. Plants manufacture their own food. A substance called chlorophyll helps plants to produce glucose and other products using sunlight and carbon dioxide from the atmosphere. Part of the food is used and part of it is stored. Animals get their food from other living beings, both plants and other animals. They digest the food. There are some interesting exceptions. A plant called the Venus Flytrap traps and devours insects. Another such plant is the pitcher plant. A more interesting exception is the euglena, a tiny organism, which has chlorophyll which it uses to manufacture food, and has also a mouth and gullet, and swallows and digests food. Would you call it a plant or an animal?

Finally, animals and plants can be distinguished by the structure of their cells. Plants have a rigid and inelastic cell structure. The cell contains mainly cellulose, a carbohydrate. In animals, the outer cell walls are soft; they are elastic and contain protein. But there are tiny animals called tunicates, which have coats containing cellulose.

These are the main differences between plants and animals. But if we think of organisms which are placed low in the scale of life, the distinction has no meaning. There are viruses and subviruses to which such a distinction does not apply. The distinction is clear only when we move higher up in the scale, especially when we speak of highly developed forms of life.

8. **A Process to Make Washing Soap**

To make your own soap you require 1kg of caustic soda, 1 kg of maida, 2 kg of groundnut oil, 400 g of washing soda, and 100g of a brightener like Ranipal.

Four litres of water should first be poured into a plastic bucket. The caustic soda should be added to it. The water should then be stirred with a wooden stick for about 10 minutes, until the caustic soda dissolves completely in the water. The bucket should then be covered and allowed to stand. Care should be taken at this stage, since caustic soda generates a lot of heat when it is added to water. The bucket should be kept away from the reach of children. The solution should be allowed to cool to room temperature.

In another vessel, maida, washing soda and the brightener should be mixed with groundnut oil. The mixture should be stirred well for 10 minutes.

The second solution should be poured into the bucket containing the first solution. The contents of the bucket should be stirred for 10 to 15 minutes. A tray measuring 40 cm by 30cm by 4 cm should be taken and a polythene sheet should be spread on it. The mixture should be poured on the tray to uniform thickness. The tray should be kept in the sun for a day or two, so that the mixture solidifies. Soap can thus be made in less than half the market price.

(*Source* : Dr K Srinivasan, NSS Officer, Anna University, Madras)

9. **Safety Measures in a Chlorine Plant**

Cylinders should be stored in an upright position. Full and empty cylinders should not be stored together. The storage area should be separate from places where compressed gas containers and other inflammable materials are stored. Also, care should be taken to keep the storage area far away from elevators, gangways or ventilation systems, because in the event of chlorine leak, dangerous concentrations of chlorine may spread rapidly.

While transporting chlorine cylinders, they must be carefully checked, clamped or otherwise suitably supported to prevent shifting and rolling. They should not be permitted to drop and no object should be allowed to strike them with force. They should not project beyond the sides or ends of the vehicles in which they are transported. Prior to filling the cylinder, each cylinder should be completely emptied, thoroughly cleaned and dried. Another fool-proof test to rule out surface defects, corrosion and the presence of foreign matter must be carried out.

Only cylinders which have undergone a hydraulic test should be used for filling chlorine gas.

Special care must be taken not to fill the cylinders with excess chlorine gas or liquid chlorine.

People who have asthma, certain types of bronchitis, other chronic lung conditions and any other kind of respiratory problems should not be employed in a chlorine plant.

The employees should be cautioned to prevent leaks, and avoid inhalation of gas and direct contact with the liquid. They should be told to report to the authorities immediately in the case of equipment failure. All workers must be instructed and trained to adopt preventive measures, in case of an emergency. All employees should be made aware of first-aid equipment such as emergency showers, eye-baths, fire fighting equipment, fire alarms, the use of personal protector equipment and the like and their location in the plant. They should be trained to use them in case of an emergency.

10. **Parts of a Computer**

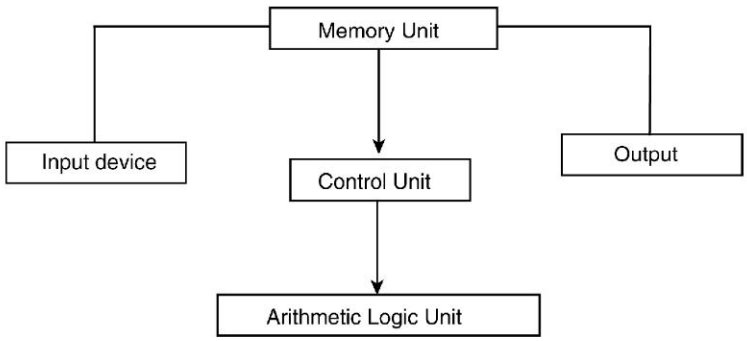
Definition of a Computer

A computer is an electronic device capable of executing instructions, based on algorithms stored in its memory, to process data fed into it and produce the required results faster than human beings.

Parts of a Computer

Computer hardware

It refers to the physical parts of the computer such as electronic circuits, keyboard, bolts and nuts that go to make the computer.



Hardware components are Input, Output, CPU (Central Processing Unit) and Memory.

Input Device

It is used to feed data and programme into the system for execution.

E.g. : Keyboard, Mouse, Magnetic Ink Character Reader (MICR), Barcode Reader.

Output Device

It is used to display the results from the memory to the user.

E.g. : Monitor or Visual Display Unit (VDU) Pointer, Plotter.

Central Processing Unit (CPU)

It is the 'brain' of the computer that actually understands and executes all the instructions. The CPU comprises of two distinct parts, namely the Arithmetic Logic Unit (ALU) and the Control Unit.

In Microcomputers, like the Personal Computer (PC), the ALU and the Control Unit are together and this unit is called a Microprocessor.

Control unit

It is the overall supervisor of the system.

Arithmetic Logic Unit (ALU)

It performs all the arithmetic and logical operations.

Keyboard

General Purpose: The keyboard is used when text is to be entered. It can also be used for drawing pictures.

There are two main styles of computer keyboards

(i) Standard with usually 83–84 keys, and
(ii) Enhanced with 100 keys or more,
The enhanced keyboards are more popular. They have some extra set of keys.

1. ***Typewriter Keys*** These are the normal keys on the keyboard and include letters, numbers and punctuation symbols.
2. ***Function Keys*** These keys are labelled as F1 to F12. They carry out different functions depending on the software we use.

3. ***Cursor Control Keys*** These keys are marked ¬, ®, - , ¯ and are called the Left, Right, Up and Down arrow keys respectively. The cursor keys are used to move the cursor left, right, up or down around the screen, one line or one character at a time.

   There are four other control keys, just next to the arrow keys. These keys are labelled as Home, End, Pg Up and Pg Down.

   Pg Up (Page Up) key is usually used to move to the previous screen or page of the document. Similarly, Pg Dn (Page Down) key is used to move to the next screen or page.

   Home key usually takes the cursor to the top of the document or the beginning of the line. End key takes it to the end of the document or the end of the line.
4. ***Numeric Key Pad*** On the right hand side of the key board is the numeric key pad, containing calculator like keys. Some of the these keys have double functions.

   The switch-over between the two functions of a key is controlled by the key marked NUM LOCK. When NUM LOCK is on (indicated by the green light beside the word NUM LOCK, on the top of the key board), these keys function as numeric keys and when it is off, they function as cursor control keys.
5. ***Caps Lock Key*** Normally, when an alphabet is typed, it is shown in the lowercase. When caps lock is pressed once, any letter we type will appear in uppercase (capital). The effect can be reversed by pressing the caps lock again.
6. ***Shift Key*** Holding down shift key and then pressing a letter key creates an uppercase letter. However, if the caps lock is ON, then this effect is reversed.
7. ***Ctrl and Alt Keys*** These keys are often used in combination with other keys, to produce special actions. For example, pressing Ctrl and C simultaneously aborts the current task or command being executed and returns to DOS prompt. By pressing Ctrl, Alt and Del keys simultaneously the machine is automatically restarted.
8. ***Enter/Return Key*** The Enter Key is used for two main purposes. It can alert our PC that we have finished giving the instruction, so that it processes or executes the instruction. When using a word processing programme, pressing enter begins a new paragraph or a new line. Enter key is also referred to as Return key.
9. ***Mouse*** The mouse is an input device that you move on a flat surface (usually a mouse pad). When you move the mouse, a pointer moves on the screen. This pointer, called the Mouse Pointer, is used to point things on the screen. The mouse has two or three buttons on the top. The left button is most often used.

Read Only Memory (ROM)

This is stored in a chip and is permanently in the computer. The contents of this memory are not affected by switching on or off the power supply. The ROM contains basic programmes such as keyboard interpretation, etc.

Random Access Memory (RAM)

This is the temporary storage of information. Required programmes and data are loaded into the RAM and the computer can have access to any part of the memory to store and retrieve information. This gets deleted every time the computer is switched off.

11. **The Uses of a Computer**

The computer is a tool containing an intricate network of electronic circuits that operate switches. It is analog or digital. The computer system is made up of what we call hardware and software. The hardware is the machine and the software refers to the programme or packages that help operate the hardware.

Its function and characteristics

The computer receives, processes, gives out, stores and retrieves information. Its speed and accuracy ensure almost instantaneous solutions to complicated arithmetic calculations.

Its potential and role

The computer has begun to affect and mould our lives, job behaviour and even our thinking. Developments in hardware systems and software packages are of innumerable tasks. In business, the computer does secretarial work, prepares and maintains payrolls, prov ides inventories of immediate reference, etc. Apart from performing these everyday tasks, it handles successfully budgeting, planning, controlling research and development activities, Cheques clearance and collection in banks, inventory control and sales in departmental stores and super markets, reservations in air and land transport systems, movement schedules for cargo flights, trains and operating instruments, printing methods, operation of production lines and robots in factories, filling containers in food plants, cutting patterns in clothing factories, sealing bottles in pharmaceutical companies are now computer controlled.

The computer plays a vital role in government agencies, too. Records of all sorts related to census, payroll and taxation are maintained by the computer. The armed forces are totally dependent on the computer for training personnel and for development of weapons and complex defence systems. Law enforcement agencies are better equipped than before. The computer helps easy and quick identification of criminals by matching fingerprints and identifying voice patterns. Weather forecasts are computer dependent.

The computer helps shape and improve activities in the fields of science, medicine and education. Geologists are able to spot new deposits of energy sources. Oceanographers collect and process data about marine life. Botanists can analyse composition of plants. The computer plays a pivotal role in space technology and space exploration. In addition to maintaining accounts and performing administrative duties in health care and helping nurses to attend to individual patients with its stored latest medical information and personal patient histories, it helps save life. It also holds vital information about life saving instances and solutions from several countries and helps in comparative studies and decision-making. With its computer-assisted instruction, the computer has realised the one time dream of teacher's attention and help to learn individually. Computer games and computer animation have brought variety to entertainment.

Conclusion

It is obvious that benefits have accrued to man. But have there been only benefits? The computer can become a threatto man. It can endanger his survival and privacy. It also offers excellent encouragement of unethical or criminal activities. It can worsen the unemployment problem, as employers prefer the computer and the compute-controlled robots to humans for obvious reasons. Whatever the dangers may be, the benefits outweigh the dangers. Thus, the computer has been responsible for the improvement of efficiency in the way organisations—private and public—function. It has improved productivity and the quality of products and services we receive from different organisations.

12. **The Uses of Internet**
    (a) Introduction
    (b) What is internet?
    (c) Ways of storing information
    (d) Uses of internet
    (e) Major uses of internet in
        (i) Business
        (ii) Industry (Advertisement)
        (iii) Education and Medicine
    (f) Conclusion

Introduction

Computers have become a household name and are being used in almost all walks of life. When two major computers are connected together, they form a network, through which we can communicate and share information with each other.

The internet is a network of computer networks, switching around (connected together) the world. Over 23 million people use the internet to find information, to conduct business, to communicate with people around the world and to play games. Anyone connected to the internet can communicate with others and access information stored on any of the computers.

Information can be stored and shared on the internet in many ways. Some of them are:

1. E-Mail:
   We can send mail around the world in minutes, correspond with friends, or join a mailing list discussion.
2. The World Wide Web:
   We can point and click to move back, the vital pages of information and graphics.
3. File Transfer Protocol (FTP):
   With it we down load files, programmes and graphics from public archives.
4. Internet Relay Chat (IRC):
   It helps us to chat with other users.
5. Telnet:
   We can connect directly to other machines on the internet.
6. Gopher:
   It is another service like WWW.

Uses of the Internet

Internet is a storehouse of information. There are several millions of pages of information available on the internet. One can find information on practically any topic that one can think of. Using the internet, one can read the information, store it in his disk and even take the printout. Copying information from another computer connected to the internet is called Downloading. Most web pages today have buttons, which we can click to download them. We can also download the information using file transfer protocol or FTP.

We can communicate with any of the millions of users of the internet using e-mail, which is electronic mail sent from one computer to another. Sending messages throught e-mail is very similar to sending a letter through the postal department, except that it is incomparably faster. Sending a message to a friend in U.S. takes about the same time as sending it to a person on a computer next to you. It is also significantly cheaper. While an ISD call to the U.S. or any other foreign country may cost about Rs. 75 per minute, sending e-mail would cost about Re.1 per minute.

Using the internet, we can also take part in interactive chat sessions with other users anywhere in the world. On the internet, several chat sessions on different topics are always on. We can join any of them and talk to anyone else by participating in that chat session. While chatting all "Conversation" appears on the screen as a series of typed messages.

We can also join a news group discussion and learn a lot about any topic of our choice. News group is a public area where any user can leave a message. These messages will be available to every other user of the internet who in turn can add his reply. In this way, a single message soon develops into a full-fledged discussion.

The most important uses of internet are in the field of education and medicine. It acts as a world library even to the persons in the undeveloped areas.

Internet has no president or chief operating officer and is governed by a number of authorities. The ultimate authority of internet rests with internet society (ISOC) a voluntary membership organisation. The purpose of this organisation is to promote global interchange of information. Another authority is a group of invited volunteers called Internet Architecture Board (IAB). The IAB sets the standard and gives internet addresses. Internet Engineering Task Force (IETF) discusses the technical and operational problems on the internet.

One can perform many tasks, if one has access to the internet.

Some of these are:

- We can publish our research papers on internet, thus making them available to others.
- We can use it for teaching. For example, we can teach languages using WWW.
- We can use it for publicity and advertisement.
- We can refer to the pictures of an art gallery.
- We can use it for multimedia conferencing.
- We can have an electronic copy of classics such as 'Alice in Wonderland'.
- We can have electronic copy of journals and magazines from the internet.
- We can meet people around the world, and be in touch with them.
- We can get free public domain programmes and also watch movies.
- We can search for specific information.

Internet is being used in various ways for providing information and knowledge. The internet is used for carrying out various types of business over the net. We can buy commodities from the large range of things.

The other major use of internet is advertising a product. The advertisement done in any other medium will be restricted to the region. On the other hand, it would be covering the entire globe that is connected to the net.

The information provided on the net includes almost all the subjects. It is an ocean of knowledge. The internet is not only the main business for the book worms or industrialists but also for the common man. It has large resources of entertainment. There are many websites that are dedicated to specific topics and events.

There are many websites that are meant for children. Students can get enough information. It is like obtaining nectar from the sieve of internet.

The major use of internet is the transfer of data, which can be virtually transferred to any corner of the world without being physically present.

E-mail is the most used mode of internet. More than 2 billion e-mails are transferred everyday over the net.

13. **Uses of Robots**

Robot is the form of programmed automation to carry out the programmed task repetitively and uncomplainingly. It is a computer controlled, one armed machine set up at the fixed place to perform several difficult tasks like machine loading, unloading, spot welding and spray painting, etc. outside the factory, robot finds its application in banks, restaurants and even homes.

Apart from performing some hard tasks, robots are also engaged in dangerous environments. In constructing building, a robot is employed to undergo risks. In coal-mining it is employed for the drilling operation where there is a danger of the eruption of poisonous gases. In fire work factories, chemical factories and nuclear plants which are the danger prone zones, robots come to the rescue to perform the hazardous task of assembling, packing, etc. Robots are also used in the military operations like fire fighting. A robot is also sent for space research and undersea operations.

In the service industry, a robot finds its utmost use. It may be employed in the task of teaching. In a company, robots can be employed for cleaning, straightening the merchandise, restocking, noting the check out time of the labourers, etc. In the 24 hour fast food restaurants, a robot may be of help to make up the order of the different customers. In the bank, it can take care of the deposits and withdrawals. The routine task of adding, subtracting, counting money, entering customer's account status can be performed easily using a robot. In garbage collection and waste disposal operation, a human being can be replaced by a robot. In the place of a security guard, a robot can be employed that can sense and report to the head who is a human being. Household robots can perform dish washings, rug vacuuming, making beds, furniture dusting, food preparation, etc. Lawn garden work can be well maintained by a robot.

14. **Role of Enginers**

An engineer is a skilled person who uses his scientific knowledge to plan and construct machinery, electrical devices or roads and bridges. There is no field where the presence of engineers is disregarded. They are the backbone in the technological development of the nation. In turn they are responsible for the socio-economic development of the nation.

There are different branches of engineering like mechanical, electrical, civil, bio-medical, metallurgical, aviation, and computer. Because of the presence of an engineering scientist, development is possible in the particular branch. Engineering knowledge is not of recent origin. The inherent engineering knowledge of the ancient man has helped him to become civilised. Starting from the discovery of fire and arriving at the launching of satellites and rockets and proceeding towards further prosperity in every field is a simple marvel of engineering.

The advancement with regard to the construction of bridges over sea, tunnel construction under sea connecting two countries, digital communication in the field of electronics, cryogenic technology, in food preservation and in medicine, conquest of space, devising robots with absolute intelligence is the toil on the part of engineers.

In our country the due credit for the present development goes to the engineers. Before independence, engineers were employed to operate and service the then existing machines. After independence, the country started realising the need for designing and finding new technology to suit the needs of the growing population. So, our engineers started working on the imported technological knowledge and apply them using their unique intelligence as a result of which the country is called a developing country that is trying to become self-reliant.

Our engineers make the optimum utilisation of the human resources to improve the well-being of all the sections of people. The goal of engineers is to absorb the new technologies along with the available technology and thus to provide a framework for the future development of the nation.

At the same time, it is a sad fact to mention that not all the efficient engineers are working for the welfare of the country. Many engineers, after they adequately qualify themselves, go and settle in foreign countries. This is inevitable because India cannot offer the same standard of living and other benefits, which are adequately provided by any other developed country. India lacks in providing sophisticated atmosphere for the research engineers to work. Above all, the engineers can easily get recognition for their research work in foreign countries rather than in our country.

Despite the above reasons for not making the effective use of all the engineers, our country does not stop from marching towards the integration of science and technology for the socio-economic development. This is possible with the help of the devoted engineers with research-oriented approach.

15. **Energy Sources**

Energy is necessary to carry out a work. Without energy no work can be done. Energy is required to retain and improve the quality of life. Energy offers vegetable and animal source of food to man, and it transports man from one place to another. The earliest source of such energy is man himself. His muscle power helps him to do useful work. Animals form the next source from which human beings have been extracting work since the dawn of civilisation. The early man started getting energy from fire whose sources were wood and plants. About 3000 B.C. people learned to make use of wind energy to drive ships and later they used the wind energy to run windmills.

During the later part of the eighteenth century, man started making use of commercial source of energy such as fossil and hydroelectric power. With coal, a marvel in transport took place. Steam engine and internal combustion engine made transportation comfortable. Due to hydroelectric power the economic well-being of people was assured. The end of Second World War brought new source of energy namely nuclear energy. Nuclear energy enables to obtain greater amount of energy from a small amount of fuel, i.e. uranium 235.

The different energy sources can be grouped under two categories namely celestial source and the capital source. The celestial source is otherwise called renewable source. It is the energy obtained from outer space of earth. This includes wind energy, solar energy, geothermal energy and tidal energy. The capital energy is the source of energy that exists on the earth or in the earth already. This includes forest wood, fossil fuel, oil and atomic energy.

The industrialisation of a developing country is accompanied by the large consumption of the commercial energy like coal and oil. Such developing countries either produce oil on their own or they depend upon the foreign countries. There are twenty-eight oil producing countries indulging in exporting the same. At the same time there are 92 import dependent countries. People in the developed countries have shifted themselves to kerosene from firewood by which the demand for oil has increased by 15–20%. As the population is increasing approximately at the rate of 2% and the energy consumption rate is increasing by 5% the oil exporting countries may have to use the exportable surplus for their own use. Moreover, the oil reserve is expected to last for another thirty-five years. The thermal power stations use coal as the energy source to produce electricity. The statistics regarding coal reserves shows that coal will last for another 90 years. The indiscriminate use of coal and oil will lead to environmental problems like air and water pollution. The wastes from the thermal power plant endanger the plant and animal life. The other non-renewable energy source namely, the nuclear wastes pose the greatest threat by radiation, which will have drastic effect on human beings for several years.

16. **Uses And Misuses of Nuclear Energy (or) Nuclear Energy for Constructive Purposes**

Nuclear energy is the alternative source of energy, rather it is a boon given to man in a situation where the non-renewable sources like mineral oil and coal are in the depleting stage. Moreover, burning coal for power generation leads to environmental hazards like acid rain. Generation of hydroelectric power causes destruction to the vast area of the forest, for they are being submerged, in which case alternative source of energy is indispensable.

The nuclear energy in the form of heat is released from the nucleus of the atom (U-235) by fission or fusion. This heat powers the steam driven electric generators in a nuclear reactor. The generator produces electricity. There are more than 350 nuclear reactors in the world. As far as India is concerned three percent of power is derived from nuclear power units. The power derived from the fusion of nucleus is useful to operate industries and the power provides electricity to the whole town. With the help of irradiation food preservation is possible. Nuclear irradiation helps in killing insects, pests, reduces the level of bacterial contamination, delays the ripening and thereby lengthen the shelf life of fruits. In the field of medicine, the radiation offers cure to certain diseases.

At the same time this radiation has its disastrous effect. The penetrative radiation in a small quantity attacks the living tissues and it can alter the genes in body cells, which will in turn result in genetic diseases and congenital birth malformation. The nuclear wastes are also radioactive and their effects remain for hundreds and thousands of years. Their disposal creates environmental problems. At present they are stored in sealed containers and dropped into deep oceans. As this ensures environmental pollution opposition is strong with regard to this practice.

Nuclear energy proves its destructiveness in the form of nuclear bombs. This has the power to destroy the whole town or city. Example of such destruction was drastically experienced by the people of Hiroshima and Nagasaki during the Second World War. The bomb used by America was of 20 kiloton power. Such war threats with the help of nuclear energy will pose a great menace to the peace of the world. Now, the UNO has advised every nation not to indulge in manufacturing nuclear weapons. America and Russia, the veto powers have signed a pact regarding non-proliferation of nuclear weapons for the good of the world. In response to the call of the UNO, the major countries like Russia, the US, France and Britain have suspended the nuclear tests for the time being.

It is time that we should realise that the nuclear energy is a blessing-cum-boon exposed to the world by the benign mother nature, and we have to use this resource profitably and for the good of the humanity. As Russel

opined, wars are decided and declared by political dictators of nation. In other words, common people have no part in the initiation of war. So it is up to the heads of the states of different nations to use the nuclear energy for the welfare of the humanity.

Do it Yourself

1. Write a paragraph of about 200 words comparing life in a village with life in a city. (M.Q.P.)
2. Describe in two paragraphs the advantages and disadvantages of nuclear power as an alternative source of energy. (200 words) (Apr./May 2003)
3. Write two paragraphs comparing human beings with robots. (Apr./May 2003)
4. Write a paragraph comparing human brain and the computer and another paragraph comparing calculators and computers in about 100 words each. (Nov./Dec. 2002)
5. Write two paragraphs describing the advantage of using solar power and wind power as alternative sources of energy in India. (200 words) (Nov./Dec. 2002)
6. Write two paragraphs comparing log tables with calculators.
7. Write two paragraphs comparing the input and output devices of a computer.
8. Describe in about 170–200 words the utility, function with advantages and disadvantages of a washing machine. (Nov./Dec. 2003)
9. Imagine yourself to be in the year 2050 and you are in your early 70's. The fuel position is very bad. Describe how life was fifty years ago when fuel was easily available. Write this in about 170–200 words. (Nov./Dec.2003)
10. Describe a roof water tank in about 170–200 words highlighting its characteristicsits purpose, function, utility and also its advantages and disadvantages. (Apr./May 2004)
11. With more and more vehicles on the roads it is becoming very risky for all vehicles that ply on the roads safely. Write in about 170–200 words, the measures that must be adopted in order to bring safety on the roads. (Apr./May 2004)
12. Write a paragraph of about 200 words explaining the wisdom of investing money in articles of gold. (Jan. 2005)
13. Write a paragraph of about 200 words highlighting the six most serious problems that are caused by the increased growth in traffic due to vehicles and also offering suitable solutions to those problems. (Jan. 2005)
14. "Computer, its Parts and Uses" – Write two paragraphs on this topic of 200 words each. (M.Q.P.)
15. Write a paragraph of 200 words stating the ways in which our environment can be preserved. (Apr./May 2003)
16. In this electronic era, people still continue to read books and magazines. Write a paragraph of 200 words describing why people still prefer to read books. (Apr./May 2003)
17. Write a passage in about 200 words on the working of a mechanism (e.g., dry cell batteries). Underline "cause and effect" and "purpose" expressions. (Nov./Dec. 2003).
18. Write a passage in about 200 words on an industrial process (e.g., clay tile making). Underline the "passive constructions" and the "discourse markers". (Nov./Dec. 2003).
19. Write two paragraphs comparing the newspaper and the television as media of mass communication. Each of the paragraphs should not exceed 200 words. (Apr./May 2004)
20. Write two paragraphs, one describing the benefits of technology the other describing the drawbacks of technology. Each paragraph should not exceed 200 words. (Apr./May 2004)

    (or)

    Discuss whether technology is a 'boon' or a 'bane', substantiating your contention in a paragraph of about 200 words. (Nov./Dec. 2004)
21. Write a paragraph of 200 words explaining the role of English as an international language. (Nov./Dec. 2004)

CHAPTER

39 Process Description

The Technical description of a process talks about how something works. It talks of the overall function of the process and the materials or skills requires. It takes the form of a narrative in the third person gives the reader and overall view of the object, idea, or process.

A typical process description will have the following elements:

1. Introduction or definition that tells when and why the process is performed.
2. The general operation, which gives an idea as to the skills and time required.
3. Description of the steps involved.
   It makes use of appropriate visual aids like a flow chart and explains the sequences involved.

IMPORTANT TRAITS

1. Choice of Vocabulary
   Words are not general and abstract. They are specific and concrete.
2. Clarity and Coherence
   Step-by-step guidance is given specifying the action in a sequential order.
3. Unity
   This feature is achieved by restricting the description to the related process and avoiding any deviation. The description should be in the impersonal tone. Passive Voice is used to achieve this. It is very common in scientific writing. We are more interested in the things that happen around us than the people who are behind them. The present tense is usually used.
   e.g. The watch glass is washed and dried.
   The mixture is heated.
   A pinch of salt is added, etc.

Examples

1. Describe very briefly the process involved in the extraction of sugarcane juice. (Apr./May 2003)

Answer

Well-cleaned sugarcane pieces are inserted into the space between two serrated cylindrical rollers, which are then rotated manually causing clockwise and anticlockwise movements. Sugarcane pieces get crushed and then the extracted juice is collected.

2. Describe very briefly the process involved in washing clothes.

Answer

Soiled clothes are collected. A bucket of water is taken and three spoons of detergent are mixed with it. When the mixture is well lathered, the soiled clothes are soaked in it. After twenty minutes, the clothes are rigorously scrubbed to get the dirt out. Then they are rinsed in clean water twice, wrung and hung up on the line.

3. Process involved in the purification of gold.

Answer

There are three ways in which gold is purified. They are flotation, amalgamation and cyanidation. In the first method, a frothing agent is added to produce foam. A collecting agent is used to produce a film on the gold, which then sticks to the air bubbles. Gold is then separated from the top. In amalgamation, the ore, mixed with water to form a pulp, is collected on a copper plate covered with mercury. The mercury is then removed, partly by squeezing it out and partly by distillation. The cyanide process is now widely used. In this process, a weak solution of sodium, potassium or calcium cyanide is used to dissolve the gold. The gold is then precipitated by the addition of zinc dust.

The gold thus obtained is smelted and cast into bars.

4. Process of extracting silver.

Answer

Silver occurs in ores of several metals. The froth process of extracting silver accounts for about 75 per cent of all silver recovered. Here the ore is ground to a powder, placed in large vats containing water suspensions of frothing agents and thoroughly agitated by jets of air. Depending on the agent used, either the silver bearing ore or the gangue adhering to the bubbles of the froth is skimmed off and washed. The final refining is done using electrolysis.

Do it Yourself

1. Describe the process of planting a sapling in your college.
2. Describe the process of opening a Savings Bank Account in a bank.
3. Describe very briefly the process of recording a song in a cassette.
4. Describe briefly the method of giving first aid to a person who has received an electric shock.
5. Describe very briefly the process of making a cup of tea.
6. Describe the process of mending the punctured tube of your two-wheeler.

CHAPTER

40 Charts and Diagrams

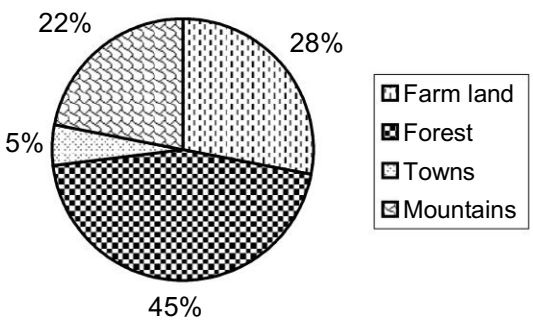
The letters or figures arranged in the code form convey certain meaning to us. When the meaning of such codes is decoded in the written form in a descriptive manner it is called transcoding.

Any set of symbols that communicates meaningful messages is a code. A language is a set of symbols and hence it is a code. Graphs, flow charts, bar charts, pie charts and tables are all set of symbols and are codes, too. Graphic aids make communication easy to understand.

A *Table* is a list of facts or figures arranged in an ordered way, especially in columns.

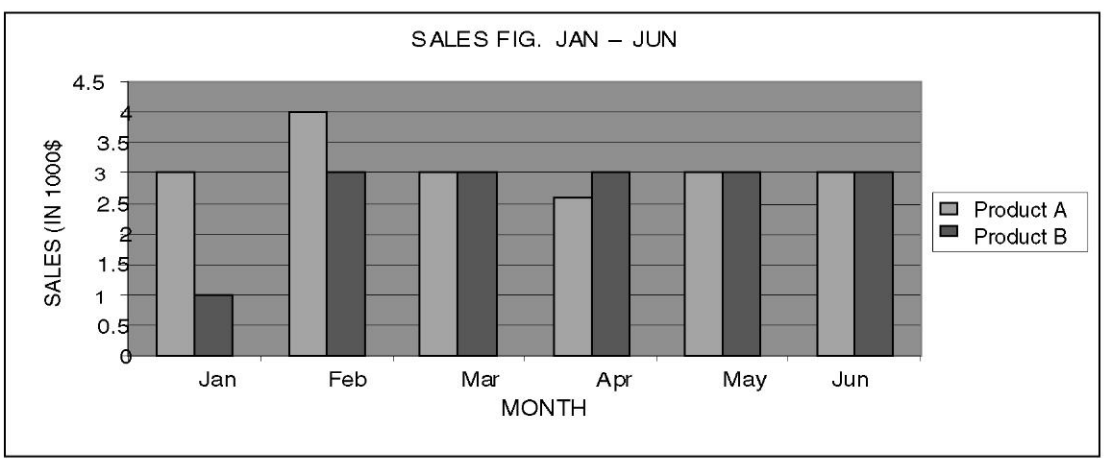
A *Pie Chart* is a diagram consisting of a circle divided into sections in which each represents a specific proportion of the whole, e.g., in order to show spending in various areas in relation to total expenditure.

Pie Chart



A *Bar Chart* is a diagram on which narrow bands of equal width but varying height are used to represent quantities.

Bar Chart



A *Flow Chart* is a diagram showing the development of something through different stages or processes.

An *Organisational Chart* shows the line of authority in an organisation. It shows the hierarchy from the top to the bottom and indicates the function of each department, subdivision or section and their relationship to the organisation as a whole.

Procedure for decoding charts and symbols

1. Take a good look at the given chart or table.
2. Understand the meanings of the code symbols.
3. Interpret and infer messages from the figures or pictures.
4. Prepare a rough draft.
5. Put these messages in logical continuity.
6. Compare and contrast variables.
7. Begin the paragraph with a topic sentence, and follow it up with sentences that help to expand, explain, elaborate, exemplify.

Examples

1. **Study the following carefully. Describe and comment on it in not more than 150 words.**

Darow '99 (2 Wheeler Producer) Sales

S. No.	Item	No. of units sold in the first quarter of	
		1994-1995	1995-1996
1.	(100 cc) Motorbikes	22,250	34,441
2.	Mopeds	55,088	75,025
3.	Scooters	2,182	8,053

Answer

Darow '99 (2 Wheeler Producer) Sales

This chart is about the sales by Darow '99 (2 Wheeler Producer) in the first quarters of 1994-1995 and 1995-1996. The company produces three types of 2 wheelers, namely, 100 cc motorbikes, mopeds and scooters.

In the first quarter of 1994-1995, the company produced 22,250 units of 100 cc motorbikes. During the same period, namely the first quarter of the following year (1995-1996) the sales reached 34,441 units, showing an increase of 12,191 which is a great achievement, reflecting the popularity of the motorbikes produced by this company.

Even the sale of mopeds recorded an impressive upward trend. In the first quarter of 1994-1995, 55,088 mopeds were sold whereas in the first quarter of 1995-1996, the sales went upto 75,025 recording an increase of 19,937 units.

Not only that, even the sale of scooters showed a very great increase. In the first quarter of 1994-1995, 2,182 scooters were sold. But in the first quarter of 1995-1996 the company sold 8,053 scooters. This proves that the two wheelers produced by Darow' 99 are in great demand.

2. Write about 15 sentences using the points given in the table. Make use of 'Contrast Words' where necessary.

S. No.	Property	Pig iron	Steel	Wrought iron
1.	Melting point	1000°C	1330°C – 1400°C	1539°C
2.	Weldability	cannot be welded	can be welded	can be welded
3.	Magnetisation	cannot be magnetised	can be permanently magnetised	can be temporarily magnetised
4.	Tempering	can be tempered	can be tempered	cannot be tempered

Answer

This table gives information about the various properties of Pig iron, Steel and Wrought iron. These properties are: melting point, weldability, magnetisation and tempering. Wrought iron has the highest melting point (1539°C) whereas pig iron has the lowest melting point (1000°C). Steel has a melting point ranging from 1330°C – 1400° C. While steel and wrought iron can be welded, pig iron cannot be welded. Pig iron cannot be magnetised. Though both steel and wrought iron can be magnetied, wrought iron can be magnetized only temporarily, whereas steel can be magnetised permanently. Further, wrought iron cannot be tempered whereas both pig iron and steel can be tempered.

3. Study the following carefully. Describe and comment on it in a paragraph of not more than 150 words.

S. No.	Producer	1988-89	1989-90
1.	Hindustan Motors	28,293	28,730
2.	Premier Automobiles	38,293	42,313
3.	Maruti Udyog	98,505	1,08,023
4.	Standard Motors	172	Nil
5.	Sipani Motors	85	Nil

Answer

Production of Passenger Cars in India

This table is about the production of passenger cars in India, in 1988-1989 and 1989-1990 by Hindustan Motors, Premier Automobiles, Maruti Udyog, Standard Motors and Sipani Motors. The table highlights the extremities in the production of passenger cars, with Maruti Udyog ranking first and Standard Motors and Sipani Motors stopping their production altogether in 1989-1990. The production of passenger cars by Hindustan Motors was 28,293 in 1988-89 and it rose to 28,730 in 1989-90 showing an increase of 437 cars. It shows that the demand for their cars increased in 1989-90. Similarly, there was an increase in the production of cars by Premier Automobiles, their figures being 38,293 and 42,313 respectively, with an increase of 4020 cars. But Maruti Udyog excelled them all with its figures in six digits, 1,08,023 in 1989-90 compared with 98,505 in 1988-1989, increasing its production by 9518 cars. It indicates that during this period people had the greatest preference for Maruti cars. It might be due to price, fuel economy, size, maintenance, resale value, etc. It is sad to think of Standard Motors and Sipani Motors whose production was 'NIL' in 1989-1990. Even in 1988-1989 their production was the lowest (172 and 85). It shows that their cars were no longer in demand. Perhaps the growing popularity of Maruti cars sealed their fate.

4. Organisation Structure of an Industrial Firm

Managing Director					
GM (Finance)		GM (Purchase and Production)		GM (Marketing)	
Manager (Resources)	Manager (Expenditure)	Manager (Purchase)	Manager (Production)	Manager (Market Research and Advt.)	Manager (Sales/ Export)
Section Head Accountants Clerks Typists Peons Menials	Section Head Accountants Clerks Typists Peons Menials	Foreman Purchase Personnel Quality Inspector	Foreman Skilled/ Unskilled Labourers		

Answer

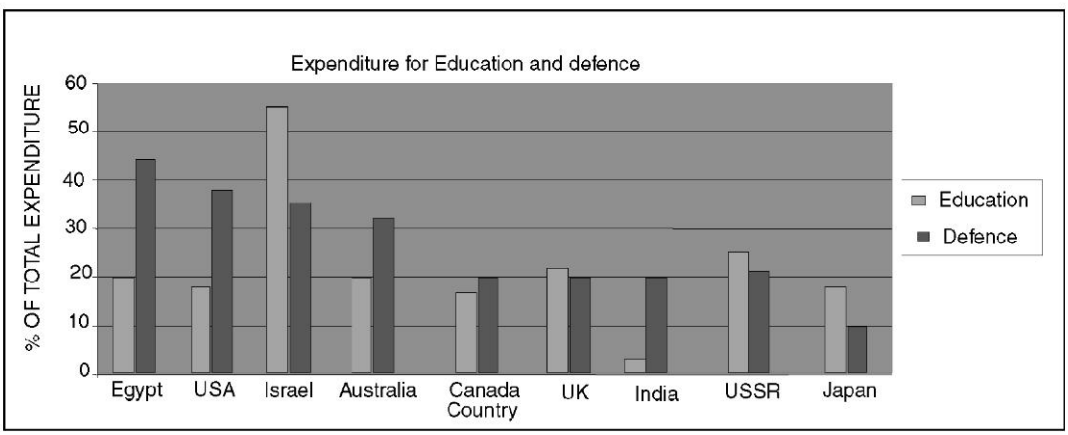
Organisation Structure of an Industrial Firm

This table shows the organisational structure of an industrial firm. The Managing Director is right on top. Under him there are three General Managers, one each for Finance, Purchase and Production and Marketing. The General Manager for Finance has two Managers under him, one for Resources and the other for Expenditure.

Similarly the General Manager for Purchase and Production has the Manager for Purchase and the Manager for Production under him. The General Manager for Marketing is assisted by Manager for Market Research and Advertising and Manager for Sales/Export respectively. Both the Managers for resources and expenditure have section heads under them who are assisted by their sub-ordinate staff—Accountants, Clerks, Typists, Peons and Menials. Without these staff, no office can work. The Manager for purchase and the Manager for production have a foreman each assisted by their sub-ordinate staff. The foreman in the purchase section has the purchase personnel and the Quality Inspector whereas the foreman in the production section has skilled/ unskilled labourers.

It could be seen from the table that both the finance and the purchase and production sections are provided with more staff than the marketing section, which is thinly manned. The finance section has more sub-ordinate staff than the purchase and production section.

5. Look at the following bar chart which describes the expenditure on education and defence as percentages of the total expenditure incurred by different countries. Write a paragraph presenting the information contained in it using expressions of comparison. (M.Q.P.)



Answer

Expenditure on Education and Defence

The given bar chart describes the expenditure on education and defence as percentages of the total expenditure incurred by different countries. The nine countries are: Egypt, USA, Israel, Australia, Canada, UK, India, Russia and Japan.

Egypt spends 20% of its total expenditure on education. On the other hand, it spends 44% of its total expenditure on defence. It spends more on defence than on education.

USA, one of the richest countries in the world, with an expenditure of billions of dollars, spends as much as 18% of its total expenditure on education whereas it spends almost 38% of its total expenditure on defence, with its most sophisticated weapons of war.

It is interesting to note that a small country like Israel has the maximum thrust on education. It spends the maximum amount, about 55% of its total expenditure on education while it spends 35% of its total expenditure on defence. Obviously, its top priority is education.

Australia spends 20% of its total expenditure on education. The percentage is the same as in the case of Egypt. But Australia spends about 32% of its total expenditure on defence which is still one of its priorities.

When we consider Canada, there is a reduced percentage of its total expenditure on both education and defence. While it is about 17% on education, it is 20% on defence.

UK, on the other hand, spends about 22% of its total expenditure on education whereas it spends slightly less on defence, which is 20%.

Our own country, India, seems to be different from other countries. It is an eye-opener that expenditure on education is only about 3% whereas on defence it is as high as 20%. The country's defence is perhaps more important than its literacy.

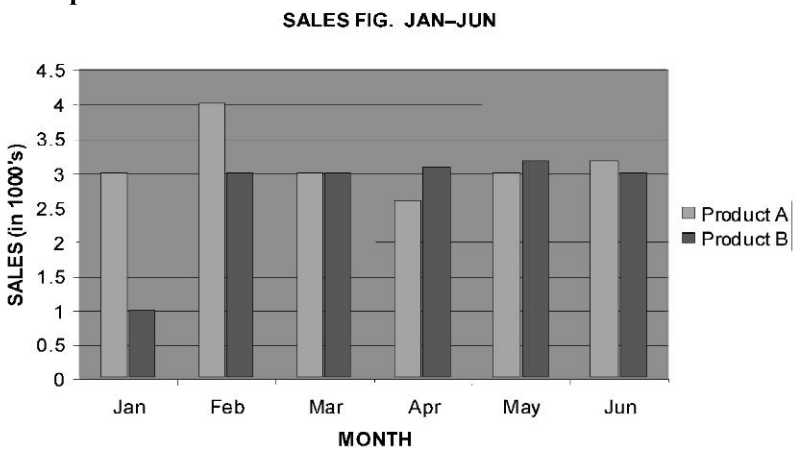
Russia, one of the most powerful countries in the world, spends a high percentage of its total expenditure on education, viz. 25% whereas it spends slightly less, that is about 21% on defence.

Japan also spends more on education. It spends 18% of its total expenditure on education. On the other hand, its percentage of total expenditure on defence is much less than 10%.

An overall view indicates that Israel leads the other eight countries in terms of its total expenditure on education which is 55%. The country that spends the least on education is India (3%).

Egypt spends the maximum percentage of its total expenditure on defence, namely, 45% whereas Japan spends only 7 to 8% of its total expenditure on defence.

6. Look at the following bar chart which describes the sales figures of products A and B for the period from January to June in respect of a firm. Write a paragraph presenting the information contained in it using expressions of comparison. (M.Q.P.)



Answer

Sales Figures of Products A and B During January–June

This bar chart describes the sales figures of products A and B for the period from January to June in respect of a firm.

In January, 3000 units of product A were sold whereas only 1000 units of product B were sold in the same period. Product A sold three times as much as product B.

The situation improved in February when the sale of product A increased by 1000 when it touched the 4000 mark, which was the highest in the entire six month period, from January to June. Similarly, the sale of product B shot up to the 3000 mark.

In March, both products A and B were in equal demand. The demand for product A became less, from 4000 in February to just 3,000 in March. On the other hand, the demand for product B was the same as it was in February, namely, 3000.

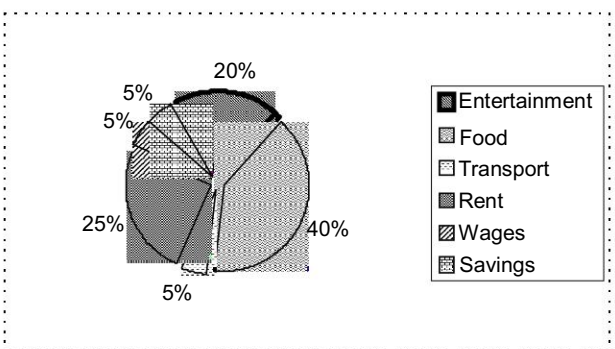
The figures for the month of April present a different picture. The demand for product A further decreased to about 2600 whereas the demand for product B was more than what it was in March. The demand for product A further diminished while the demand for product B further increased.

The month of May shows appreciation in demand for both the products. The sale of product A increased to 3,000, what it was in January, while the sale of product B was above the 3,000 mark, the highest during the period January to June.

In June, product A experienced a further rise in its sale, well beyond 3,000, next only to what it was in January but the sale of product B for the first time showed a decreasing trend, but still firm at 3,000, what it was in February.

The bar chart shows that the maximum sale of product A was in February when it touched the 4,000 mark, whereas the maximum sale of product B was in May, when it was above 3000. It was a big leap from 1,000 in January.

7. Look at the following pie chart, which shows the different ways Mr. Gupta spends his monthly income. Write a paragraph presenting the information contained in the chart. In about 100 words, write whether Mr. Gupta is spending his income wisely or not. (Nov./ Dec.2002)



Answer

The given pie chart shows the different ways Mr.Gupta spends his monthly income.

Mr. Gupta has his own lifestyle. He spends the chunk of his income, 40% on food. For rent, he pays 25% of his monthly income. On entertainment, he spends 20% of his monthly income. He spends 5% of his monthly income on transport and an equal amount on wages. After all this, he is able to save only 5% of his monthly income.

Mr. Gupta is not spending his income wisely. Perhaps he believes in enjoying life without much thought for the future. That is why he spends 60% of his monthly income on food and entertainment. To make life comfortable, he lives in a house for which he pays 25% of his monthly income as rent. It seems he discounts the future heavily. That is why he saves only a meagre percentage (5%) of his monthly income.

If Mr. Gupta spends less on food, entertainment and rent, and saves more, he can have a secure and comfortable future.

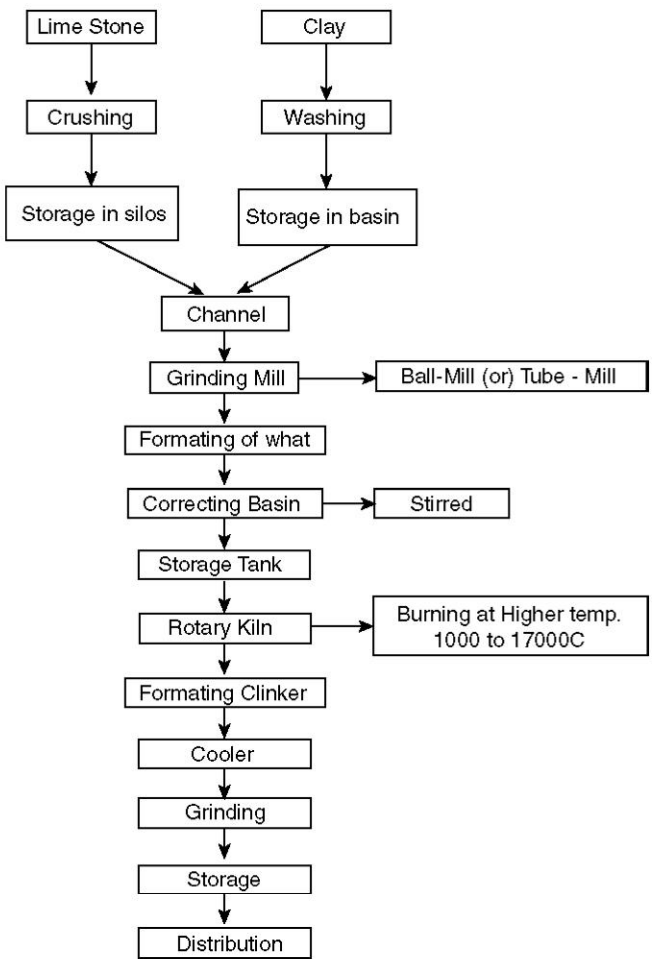
FLOW CHARTS

The following sequential expressions and connectives are used in describing a process or explaining a flow chart.

at first	then	until	thereafter	obtained	from
initially	finally	derived	from	subsequently	on

8. Flow Chart:

Stages in Making Cement



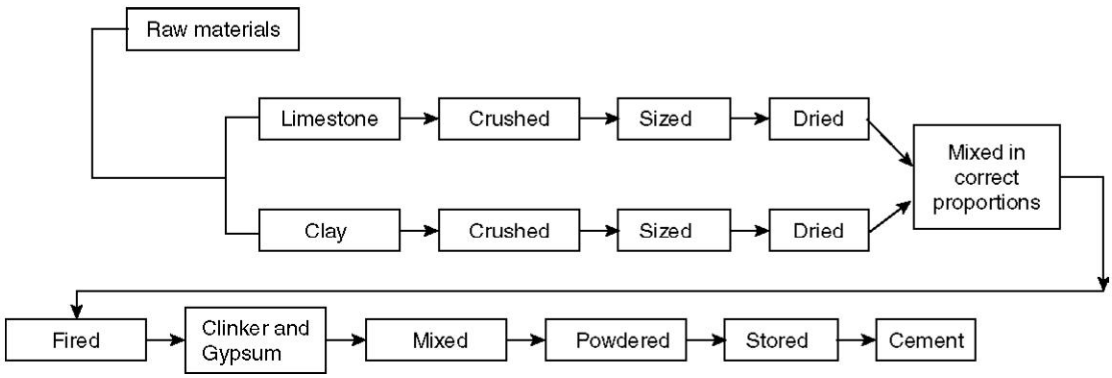
Answer

Stages in Making Cement

This flow chart describes the various stages in making cement. Limestone is crushed and sent to the storage silos. Clay is washed with water and stored in the storage basin. The crushed limestone and clay are mixed in proper proportions and are channelised to a grinding mill where they are ground and the formation is known as slurry. In order to grind, either ball-mill or tube-mill is used. The slurry is led to the correcting basin where it is stirred well to ensure the correct composition of the mixture. After that, it is taken to the storage tank. Then it is fed into the rotary kiln where it is burnt at a higher temperature (1000 to 1700°C). Clinkers formed are sent to the cooler. The clinkers are ground and sent to the storage silos. Now the finished product in the form of cement is ready for distribution.

9. Convert the following flow chart into a paragraph of about 150 words. Use an introductory and a concluding sentence with proper sequential expressions and appropriate connectives. (M.Q.P.)

The Process of Making Cement



Answer

The Process of Making Cement

The flow chart describes the process of making cement. The two raw materials used in the process are limestone and clay. Limestone is crushed, sized and dried. After that, it is stored in the storage silos. Similarly, clay is crushed, sized, dried and stored in the storage basin. The crushed limestone and clay are mixed in correct proportions. The formation is known as slurry. The slurry is fed into the rotary kiln where it is burnt at a higher temperature (1000 to 1700°C). A chemical reaction takes place and clinkers are formed. Now gypsum is added to the clinker. The mixture is powdered and sent to the storage silos. Eventually the finished product is ready in the form of cement. In this way cement is made.

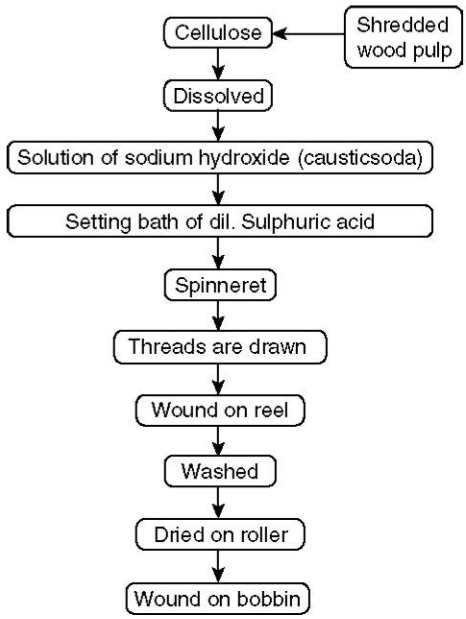
10. Given below is a process description. Read it and draw a flow chart representing the process described. (M.Q.P)

Rayon is a man-made fibre. It is, infact, a reconstituted natural fibre-cellulose. Rayon is made by dissolving cellulose in a solution of sodium hydroxide, or caustic soda, as it is usually called. The cellulose is obtained from shredded wood pulp. The dissolved cellulose is formed into threads by forcing it through a spinneret in a setting bath of dilute sulphuric acid. The threads are drawn from the setting bath, wound on reel, washed, then dried on a heated roller, and finally wound on to a bobbin.

Answer

The Process of Making Rayon

RAYON (Man-made fibre, reconstituted fibre - cellulose)



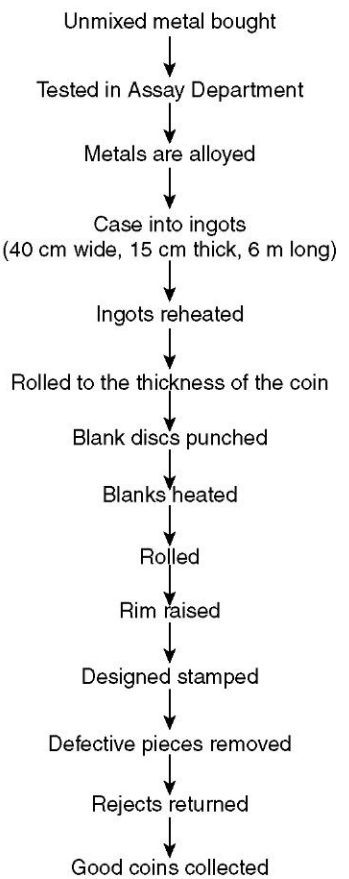
11. Using the information provided in the given text, draw a flow chart describing the different stages involved in the making of coins. Remember to give an appropriate title to your flow chart:

(Apr./May 2003)

Coins are manufactured in a factory known as a mint. There are three mints in India: Bombay, Calcutta and Hyderabad. Production of coins at the mints is a complete process. It starts with the buying of unmixed metals and their testing by the Assay Department. Then the metals are alloyed in oil-fired or electric arc furnaces, and cast into ingots 40 cm wide, 15 cm thick and 6 m long. These ingots are reheated until the temperature is hot enough for hot rolling. During this stage, the ingots pass through a series of rollers until they form long, thin sheets which are the thickness of a coin. From these thin strips, blank discs are punched. These are the basic raw materials for the manufacture of coins. The blanks are heated to soften them, and they are rolled so that the rim is raised. Finally they are stamped with the design of the coin. At every stage, defective pieces are carefully sorted out, and (with the frequent checking and returning points) strict quality control is maintained. Rejects are returned to the alloying stage, together with the waste from the alloy strip.

Answer

The Process of Making Coins



Do it Yourself

1. Study the following carefully. Describe and comment on it in not more than 150 words. (Apr.'97)

Steel Production (in million tons)

S. No.	Country	1985	1986	1987
1.	Japan	105.3	98.3	98.5
2.	USA	80.1	74.0	81.0
3.	China	46.7	51.9	55.3
4.	Germany	40.5	37.1	36.3
5.	India	10.5	11.9	12.3
	Total world production	720.1	715.4	734.7

2. Production of Electricity in Tamil Nadu (Apr. '98)

Sl. No.	Type	1986-87	1987-88	1989-90
1.	Hydro electricity	3,319	2,184	3,353
2.	Thermal electricity	6,129	7,161	7,868
3.	Wind power		1	3

3. Small Scale Industries (Nov. '98)

S. No.	Year	No. of units in Tamil Nadu	No. of units in India
1.	1985-86	72,000	53,000
2.	1986-87	82,000	57,000
3.	1987-88	91,397	15,76,000
4.	1988-89	1,02,224	17,01,000

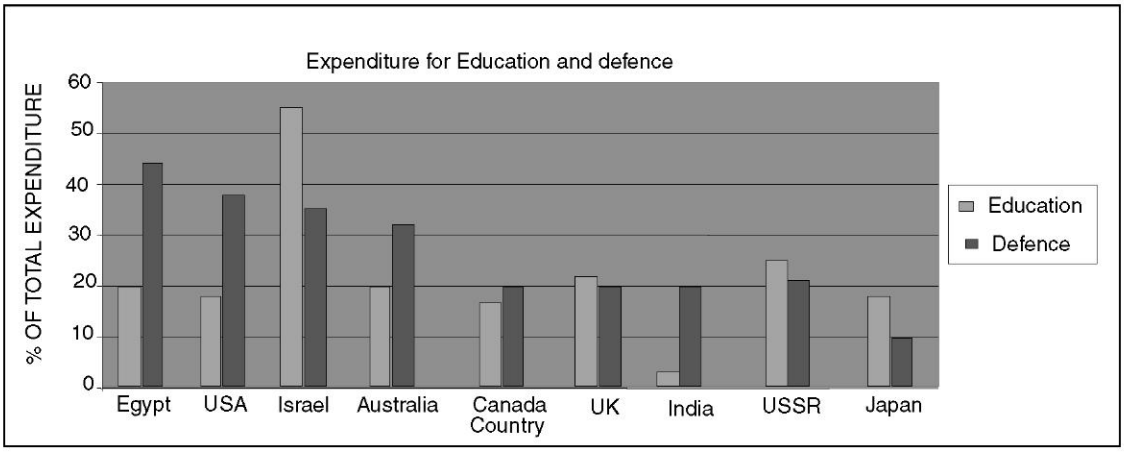
4. Differences Between Mass and Weight (Apr. 2000)

Sl. No.	Mass	Weight
1.	Mass of a body is the measure of its inertia	Weight of a body is the gravitational pull acting on the body
2.	Mass of a body remains the same wherever the object is and hence is a scalar quantity	Weight of a body changes from place to place depending on the ravitational pull and hence is a vector quantity
3.	Mass is a fundamental quantity	Weight is a derived quantity
4.	Mass of a body is measured using a beam balance	Weight of a body is measured using a spring balance
5.	Units of mass are grams and kilograms	Units of weight are kilogram weight, gram weight and Newtons

5. Foodgrain Production in India (Oct. 2000)

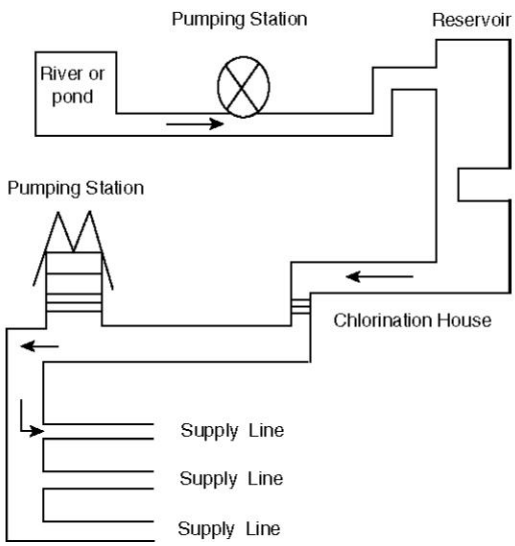
Production in Million tons	1993-94	1994-95	1995-96	1996-97	1997-98
Rice	56	49	59	61	62
Sugarcane	25	24	28	29	30
Coffee	11	11	18	24	41

Look at the following bar chart which describes the expenditure on education and defence of the total expenditure incurred by different countries. Write a paragraph presenting the information contained in it using expressions of comparison. Also give your comments in about 100 words, on defence expenditure and whether you think it is necessary or not. (Nov./Dec. 2002)



7. Look at the flow chart given below and write a paragraph describing the process involved in the purification of water and its supply to the people of a town in about 100 words. Also, write a paragraph of 100 words pointing out the importance of purifying water before it is supplied to the public. (Apr./May 2003)

Process of Purification of Water



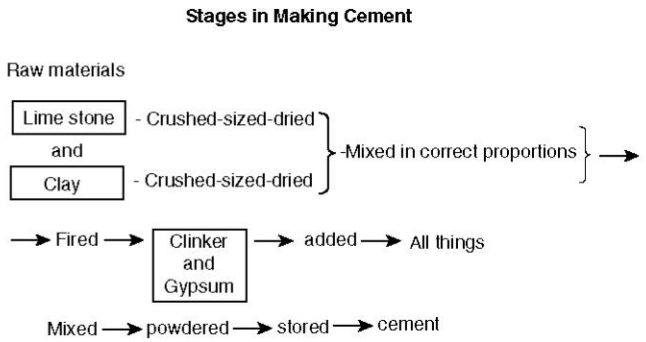
8. Convert the following passage into a flow chart. (Jan. 2005)

The earth contains a large number of metals which are useful to man. One of the most important of these is iron. The iron ore which we find in the earth is not pure. It contains some impurities which we must remove by smelting. The process of smelting consists of heating the ore in a blast furnace with coke and limestone and reducing it to metal. Blasts of hot air enter the furnace from the bottom and provide the

oxygen which is necessary for the reduction of the ore. The ore becomes molten, and its oxides combine with carbon from the coke. The non-metallic constituents of the ore combine with the limestone to form a liquid slag. This floats on top of the molten iron and passes out of the furnace through a tap. The metal which remains is pig iron.

We can melt this again in another furnace—a cupola—with more coke and limestone, and tap it out into a ladle or directly into moulds. This is cast iron.

9. Convert the following flow chart into a running passage of 200 words. (Jan. 2005)



10. Read the following passage carefully. (Apr./May 2004)

Silver occurs in ores of several metals. The froth process of extracting silver accounts for about 75 percent of all silver recovered. Here the ore is ground to a powder, placed in large vats containing water suspensions of frothing agents and thoroughly agitated by jets of air. Depending on the agent used, either the silver-bearing ore or the gangue adhering to the bubbles of the froth is skimmed off and washed. The final refining is done using electrolysis.

Represent this by means of a flow chart.

11. A manufacturing company realised the gross return of Rs. 2,75,000 during 1980. Rs. 75,000 was spent on maintenance of infrastructure, Rs. 1,20,000 towards wages for marketing the products; Rs. 30,000 was spent on transport and Rs. 10,000 on commissions. Rs. 30,000 was repaid towards loan. The remaining amount was reinvested in manufacture. Represent this allocation on a pie-chart showing the item of minimum expenditure, the item of major expenditure and work out each expenditure into percentage. (Apr./May 2004)

12. Read the following passage carefully and draw a flow chart. (Nov./Dec. 2003)

Calcareous material like limestone/marl is one raw material. Argillaceous material like clay/shale is another raw material. Limestone/marl is crushed and powdered and sent to the storage silos. Clay/shale passes through washing and reaches the wash basins. The powdered limestone from the storage silo and the clay/shale from the wash basins are proportionately mixed and sent to the unit where they are ground. After grinding, the mixture becomes slurry. The slurry is passed through the correcting basin and the slurry storage tank into the rotary kiln. Coal which is crushed and dried and pulverised in the grinding ball mill reached the rotary kiln where the slurry is heated. From the kiln, the material reaches the cement clinker from where it reaches the stage for being cooled. After cooling, it passes into the clinker storage from where it reaches the clinker grinding elevators. Gypsum is added at this stage. From the grinding elevators, cement reaches the silos. From the silos, it becomes cement ready to be weighed and packed.

CHAPTER

41 Formal Letter Writing

A letter has been defined as a conversation by post. Letters are perhaps the most commonly used form of written communication. We write letters when we need to communicate with people who are away from us.

There are several different kinds of letters such as friendly letters, Business letters, etc. each of which has its own particular form; but there are certain matters of form common to all. They are:

1. The Heading
2. Date
3. The Courteous Greeting or Salutation
4. The Communication or Message –the body of the letter
5. The Subscription or Courteous Leavetaking
6. The Signature
7. The Superscription on the envelope

The Heading This informs the reader *where* you wrote a letter. It should be the writer's full postal address. The position of the heading is the top right hand corner of the first page.

Date The sequence is day, month and year without any punctuation mark. Except March, April, May and June you can use the standard abbreviations of the other months. The date comes just below the address as shown below:-

5, Nethaji Road,
Erode - 638 001.
5th September, 2001.

or

5 Nethaji Road
Erode - 638 001
5th September 2001

The Courteous Greeting or Salutation This form of Greeting will depend upon the relation in which you stand to the person to whom you are writing:

(i) To members of your family, for example, it will be
My dear Father, My dear Mother (Mummy), Dear Aunt,
Dear Ashok,

(ii) To friends, it will be
Dear Shri Rajan or Dear Rajan,

(iii) To business people, it will be
Dear Sir or Gentlemen,
If you address an officer by his designation, write "Dear Sir", "Dear Madam", "Sir", "Madam". If you address an officer by his or her name, you may write

Dear Shri Ashok

Dear Dr (Mrs) Gupta

Dear Miss Johnson

The Communication or Body of the letter The body contains the contents or message of the letter and the style in which it is written will depend upon the kind of letter you wish to write. The body of the letter has three sections.

(a) The opening which states the purpose of writing the letter and reference to any previous correspondence on the subject.
(b) The message, giving essential details and explanation.
(c) The concluding remarks which indicate what action you expect the receiver to take.

You should use simple and direct language and short sentences. The message should be complete. The letter should be written neatly taking utmost care with regard to the punctuation marks.

The Subscription or Courteous Leave-taking It is a formal way of signalling the end of the letter and is written two spaces below the end of the body. The first letter of the first word of a complimentary close is written in capitals.

Yours faithfully or Yours truly or Yours sincerely

The following forms of Subscription can be used in various type of letters.

(i) To relatives and near friends:
Yours affectionately, Your affectionate (or loving) son, or brother or friend.
With love and best wishes.
From your affectionate friend.
'Sincerely' should not be used in letters beginning with Dear Sir, after which the proper word is faithfully or truly.

The Signature Two spaces below the complimentary close, the writer signs the letter.

Yours faithfully,
S.P. Gopal.

In letters to strangers the name is typed below the actual signature. A lady should prefix to the name Smt. or Kumari in brackets.

Yours faithfully,
(Smt.) K.S. Rajan.

The Superscription on the envelope:
This may be spaced and punctuated in either of the following ways.

Shri.S.K. Nagarajan,
5 Big Street,
Chennai - 600 005.

or

Shri.S.K. Nagarajan
5 Big Street
Chennai - 600 005

LETTERS TO THE EDITOR

These should always be addressed to "The Editor", and they usually end with 'Yours truly'. The proper form of Salutation is *Sir,* and not *Dear Sir.* These letters should be short.

Suggestions :

Keep the content brief and precise.
Write intelligibly.
Be lucid and clear in your thoughts and expressions.
Use short paragraphs and short sentences.

1. Write a letter to the Editor of a newspaper about the loudspeaker nuisance in your locality.

Erode - 1
21st August, 2003.

To

The Editor,
The Hindu,
Chennai - 600 002.

Sir,

I shall be grateful if you could kindly publish the following in the "Letters to the Editor" column of your esteemed daily.

Of late the loudspeaker nuisance in our locality has become a menace. Not a day passes without it. All my appeals, complaints and entreaties to the authorities have fallen on deaf ears.

There are two marriage halls in our locality. Almost every day there is a marriage—sometimes two marriages. Marriage is primarily a private matter but people make it a public affair. They make it a point to play cassettes and use the loudspeakers to carry the sound as far as possible. We just can't avoid being distracted by this. The sound is deafening our ears.

When it is election time, one just can't sleep at night or have peace during the day. The sounds disturbs us round the clock. Students find it impossible to concentrate on their studies. Old and sick people, even children are tortured by these most unwanted noises.

When any V.I.P is visiting our town, the autos, cars and taxis are fixed with loudspeakers to announce the arrival and engagements of the V.I.P as if people have no other work to do.

When people take out processions, they no longer believe in silent marching. The whole world must know that they are agitating. They also use loudspeakers to attract the attention of everyone.

In the interest of peaceful living, allowing people to carry on with their work without any disturbance from outside, I appeal to the authorities through these few lines in your newspaper, to take immediate steps to put an end to this public nuisance.

Yours truly,
(S.P. Rajan),
55, Brough Road,
Erode - 638 001.

2. Write a letter to the editor of a newspaper highlighting any four problems faced by commuters in city buses. Suggest suitable solutions for each one of the problems highlighted in about 200 words.

(Nov./Dec. 2002) (Apr./May 2003)

Erode-1

10th August, 2003.

To

The Editor,

The Hindu,

Chennai-600 002.

Sir,

I shall be grateful if you kindly publish the following in the "Letters to the Editor" column of your esteemed daily.

Commuters in city buses face several problems; some of which are over crowding, accidents, thefts and irresponsible behaviour of the conductor and the driver among others.

The following solutions are suggested for these problems.

Let there be more buses during peak hours. Besides the government buses, more private buses may be permitted on busy routes. Mini buses and share autos could also be of great help.

There are frequent accidents due to rash and negligent driving. Also, there is unhealthy competition among bus drivers for making their buses 'super fast'.

The authorities should take strict action against such drivers in the interest of public safety. Speed limit and speed breakers are needed at important points.

A crowded bus seems to be the best place for pickpockets. Their sharp fingers work wonders. To check this menace at least during peak hours, police personnel should be posted.

Many a time commuters are at the mercy of the driver and the conductor. To tease commuters, as it were, drivers don't stop the bus at the bus stop or stop it far away from the bus stop. Commuters get panicky and run after the bus. Sometimes conductors insist that the commuters tender the exact fare; otherwise they are not allowed to board the bus.

After all buses are meant for the comfort and convenience of the commuters. Then why this attitude? I hope something will be done to set things right.

Yours truly,

(K.P. Hari)

55, Brough Road,

Erode-1.

Do it Yourself

1. Write a letter to the Editor of a local newspaper expressing your anguish over the pollution caused by the discharge of untreated effluents by the factories of your locality. (Apr.'99)
2. Write a letter to the Editor of a newspaper on reckless driving.
3. Write a letter to the Editor of a local newspaper drawing attention to the insanitary condition of the city bazaars.
4. Write a letter to the Editor of a newspaper complaining of the bad quality and inadequate supply of Municipal water in your town.

5. Write a letter to the Editor of a newspaper complaining about the problem of stray cattle in your area.
6. Write a letter to the Editor of a newspaper highlighting any four serious problems related to traffic in a metropolitan city like Chennai. In your letter you should also suggest suitable measures in order to overcome the problems that you have highlighted. (Apr./May 2004)
7. Write a letter to the Editor of a newspaper explaining the need for providing bright street lamps in your street where there is no adequate lighting for most part of street. (Nov./Dec. 2003)

LETTER FOR SEEKING PRACTICAL TRAINING

For the project work, students have to write letters to companies/factories/industries/mills concerned and get prior permission to undergo training. The following details have to be mentioned:

1. Branch of engineering and division/section where he/she wants to get training.
2. The probable duration of the training and the proposed date.
3. Whether he/she has been sponsored by the institution where he/she is studying.

Erode - 1
26th April, 2003.

From

R. Srinivasan, III B.E. (E.C.E.),
Erode Sengunthar Engineering College,
Thudupathi,
Erode - 57.

To

The Personnel Manager,
Lucas TVS Ltd.,
Padi,
Chennai - 600 050.

Sir,

Sub : Permission to undergo practical training—Reg.

I am a III year B.E Electronics and Communication Engineering student of Erode Sengunthar Engineering College, with keen interest in Machine Tool Design pertaining to auto electricals. I have chosen this topic for my project work. I wish to undergo practical training in your prestigious factory during the summer vacation from 15.05.2003 to 14.06.2003.

The practical training under your expert guidance will enable me to carry out my proposed project in the above field successfully. Moreover, I am confident that this practical training will equip me with the latest trends in this field. As your world-renowned company has the most sophisticated equipment and foreign qualified technicians, I would be able to get the best guidance, training and experience.

Kindly grant me permission to undergo training in your esteemed company. I assure you that I shall abide by all the rules and regulations stipulated by your company. Our Professor and the Principal have issued a sponsorship certificate which I am enclosing for your favourable consideration.

Thanking you,

Yours faithfully,
(R. Srinivasan).

Do it Yourself

1. Write a letter to a factory requesting them to permit you to undergo practical training in their factory. Give the reason for your choice, your project work, your elective, your academic achievement, the duration of the training and how you could be useful to them. (Nov. '97)
2. Assume suitable names and address.
   Write a letter to a factory requesting them to permit you to undergo practical training during the summer vacation. Give your academic achievements, project work, reasons for your choice and your usefulness to them. (Apr. '99)
3. Write a letter to a well-known company/factory requesting them to permit you to undergo practical training with them during your summer vacation. Give your reasons for choosing them; your usefulness to them; how your project work is related to their field. (Oct. 2000)
4. As the representative of your class, write to some well-known companies/industries in the field of electronics in and around Bangalore seeking permission to visit them. Specify the dates and time of your visit, request for guidance from experts and discussion with experts in the field. (Oct. 2000)

LETTER FOR UNDERTAKING PROJECT WORKS IN INDUSTRIES

Brilliant Constructions Pvt. Ltd.

5, Nethaji Road
Erode - 638 001
Ph : 0424 2257752
Mobile : 99430 69333
27th July, 2007

General Manager
Premier Food Products
41, Brough Road
Erode - 638 001.

Dear Sir,

We introduce ourselves as a leading Construction Co. in Erode. We have been in this field for more than 4 decades. So far we have constructed more than 100 office buildings and houses in Erode. Those who gave us contracts are fully satisfied with our performance. In fact, we have become a household name in Erode. Whenever there is any construction assignment, people recommend our name.

We are enclosing a list of all the constructions we have carried out so far for favour of your kind consideration.

We are known for perfect and most satisfactory execution of the contracts given to us. Our rates are most competitive and our work is A-1. We always put in our best efforts to satisfy all our clients.

We are told that you have an expansion plan. You wish to construct an Administrative Block on the most modern lines. You wish to have one of the best Administrative Blocks in Erode. We guarantee neat execution of such a project at the most competitive rates. In this regards, we shall be grateful if you could call us for a meeting at your convenience so that we could discuss this project and make your dream come true.

We are confident of executing the project to your fullest satifaction. Our M.D. Mr. Mohan Raj, a leading Civil Engineer, is just a call away.

We look forward to a favourable response and an early call from you.

Your truly,
S. Gopalan
(Manager)

LETTERS OF APPLICATION FOR JOB

The job application letter usually has the following components.

1. Introductory statement indicating the source from which you came to know about the vacancy.
2. Personal data such as date of birth, marital status, address, nationality, etc.
3. Record of education—starting from Hr. Sec. Exam to the highest level, emphasising the degrees or the courses which make you suitable for the job.
4. Record of experience—organisation where you previously worked, duration of the job and the nature of duties.
5. Commendations and awards received, prizes won, research papers and books published, conferences attended, etc.
6. References—Names and address of at least three persons who can vouch for your ability and sincerity in work, preferably one of the teachers in the university or college attended, one of the previous employers, and one other responsible person who is acquainted with your work and conduct.

   A job application letter has two parts. The first part is a short introduction which contains the introductory statement, i.e. a reference to the source of information about the job vacancy and highlights the outstanding qualifications of the applicant. The other part of the letter is the bio-data or the résumé or curriculum vitae which lists not only the educational qualifications and job experience of the applicant but also his personal details, his awards and commendation and other special qualities which make him suitable for the job.

Application for Job

Erode-1,
20th August, 2001.

From

S. Krishnamoorthi, B.E., M.B.A.,
59, Nethaji Road,
Erode - 638 001.

To

The Personnel Manager,
M/s. Voltas Ltd.,
6, Armenian Street,
Chennai - 600 001.

Sir,

Sub: Application for the Post of Production Manager—Reg.

In response to your advertisement in 'The Hindu' dated 20th August, 2001, I wish to apply for the Post of Production Manager in your prestigious company as I believe I have the requisite qualifications and experience for the job.

After doing my B.E. from Bharathiar University, Coimbatore, I did MBA from IIM, Ahmedabad. I have been working as Assistant Production Manager in Sri Lakshmi Mills, Coimbatore for the past four years. I have gained enough experience in using modern techniques for increasing the production. I am enclosing my résumé along with other testimonials for your perusal.

I am confident that I would get more opportunities for professional development and for making significant contribution in your highly esteemed and progressive organisation. I assure you, Sir, that I shall discharge my duties to the entire satisfaction of my superiors. I would be available for an interview at any date convenient for you.

Thanking you,

Yours faithfully,
(S. Krishnamoorthi)

Encl : résumé.

Résumé

Name	:	S. Krishnamoorthi
Date of birth	:	10th September1974
Address	:	59, Nethaji Road, Erode - 638001.
Nationality	:	Indian
Marital status	:	Unmarried
Present designation	:	Assistant Production Manager, Sri Lakshmi Mills, Coimbatore.

Educational Qualifications:

S. No.	Examination	Percentage	Board/University
1.	Higher Secondary Exam 1991	97.5 II rank in the State	State Board
2.	B.E. (Mechanical) 1995	95.2	Bharathiar University
3.	MBA 1997	86.2	IIM, Ahmedabad

Specialised Projects / Courses:

B.E.

1. Quality Control of Metal Cutting. (A Project)
2. Economics and the Design Production Level in an industry.

MBA

1. Production and Quality Control.
2. Technological Forecasting.
3. Project Scheduling and Resource Allocation. (A Project)

Training:

January—June 1994.

Underwent training at Salem Steel Plant, Salem and learned modern techniques for increasing the production in an industry.

Work Experience:

July 1997 to present day Asst. Production Manager, Sri Lakshmi Mills, Coimbatore.

Extra-curricular Activities:

Games : Captain of Bharathiar University Cricket team. Active participant in Tennis and Football teams.

References:

1. Dr. S. Subramaniyam,
   Prof. and Head,
   Department of Mechanical Engineering,
   Erode Sengunathar Engineering College,
   Erode - 638 057.
2. Prof. S.R. Rajan,
   Director,
   Indian Institute of Management,
   Ahmedabad - 43.
3. Shri K.P. Sundaram,
   Managing Director,
   Sri Lakshmi Mills,
   Coimbatore.

Declaration:

I declare that the particulars given above are true to the best of my knowledge and belief.

Place : Erode (Sd) S. Krishnamoorthi

Date : 20th August, 2001. Signature.

Do it Yourself

1. Read the following advertisement which appeared in the *Daily Mirror*, dated 10th May 1996.
   Adt. No. TNPSC / No.22/AE (E)
   Applications are invited for fifty appointments as Assistant Engineer (Electrical) in the Tamil Nadu Public Works Department.
   Detailed particulars and form of application can be obtained from the Secretary, Tamil Nadu Public Service Commission, Chennai 600 002, by a requisition in writing specifying the advertisement number, with a crossed postal order to the value of Rs.50 payable to the Secretary, TNPSC, at Chennai and with a self-addressed envelope (26 × 12cms) with postage stamps for Rs.10 affixed. Write a requisition letter.
   (Nov.'97)
2. Assume suitable names and addresses. Johnson and Johnson Company, Mount Road, Chennai, requires Maintenance Engineers in Electrical/Mechanical Engineering. The incumbents should have minimum five years experience in the relevant field. Write an application for the job with suitable biodata. (Apr. 2000)
3. Write an application for the post of Assistant Engineer in Hindustan Engineering Works, 103, Nehru Road, Delhi -100001. Provide your biodata. Address you application to the Personnel Manager of the company.
   (M.Q.P.)

4. Write a letter of application with biodata for any one of the positions in response to the following advertisement.

   SAMYO SOFTWARE Ltd. invites applications for the following Analysts.

   Senior Systems Analysts.

   Program Analysts.

   Qualification : Graduate and Post Graduate Engineers or an MBA, or Graduates in Computer Technology from a reputed college/University would qualify for the above posts. Mail your applications to 'Manager (Personnel)', SAMYO SOFTWARE Ltd., New Colony, Chennai - 41. (Nov.'99)

5. Read the advertisement given below and write a letter of application, with biodata, for the post advertised.

   For designing and managing a large information network, applicants should have a Bachelor's degree in Engineering, should be skilled in computer language and should have excellent communication abilities. Applications should be addressed to The General Manager, TVS Whirlpool Ltd., Chennai - 20. (Nov.'99)

6. Write an application for the post of Assistant Engineer in a factory. Provide your biodata.

   (M.Q.P. 2001)

7. Write a letter to the Principal of your college requesting him to grant you leave for two days.
8. Write a letter to your Principal requesting him to issue you a Conduct Certificate.
9. Write a letter to your Principal requesting him to issue you a Transfer Certificate.
10. Write a letter to your Principal requesting him to give you a Testimonial.

PART V

Listening

CHAPTER

42 Listening Skills

"We are given two ears but only one mouth, because listening is twice as hard as talking".

Good communication, requires good listening skills. Effective communication exists between two people when the receiver interprets and understands the sender's message in the same way the sender intended it.

Good listening leads to easy communication. In order to be a good listener, it is necessary to appreciate the listening process and master listening skills.

THE PROCESS OF LISTENING

Listening is a process. Listening is a lot more than hearing. Listening starts with hearing but goes beyond. In other words , hearing is a necessary but not sufficient condition for listening. Listening involves hearing with attention. Listening is a process that calls for concentration. Hearing refers to the perception of sound with the ear. Hearing is a physical act. Listening is done not only with the ear, but also with the other sense organs. In other words, listening has to do with the ears, as well as with the eyes and the mind. Hearing is physical, while listening involves both the body and the mind.

It is an often quoted research finding that the human mind can process words at the rate of about 500 per minute, whereas a speaker speaks at the rate of about 150 word a minute. It is this gap that makes for ineffective listening as the mind of the listener races faster than that of the speaker.

Listening is a total process that involves hearing with attention, being observant and making interpretations. Good communication is essentially an interactive process. It is quite often a dialogue rather than a monologue. It is necessary for the listener to be interested and also show or make it abundantly clear that one is interested in knowing what the other person has to say. Good listeners put the speaker at ease. The listener can and should help the speaker in establishing a wave length through which communication traverses smoothly.

The process of listening involves: Hearing, Decoding, Comprehending, Remembering and Responding

(a) Hearing — It is a physical act. It relates to receiving the words sent out by the speaker for further processing by the listener.

(b) Decoding — Decoding involves sensing and filtering of verbal messages. Decoding takes places as a conscious exercise. It involves filtering, the message received to be classified as wanted or unwanted, useful or otherwise. The process of decoding discards useless or unwanted information. This filtering process is subjective in nature and a person chooses to retain only that which makes sense to him. Sense of appeal and sense of judgement come into play during sensing and filtering the message. The message is thereafter sent to the next process.

(c) Comprehending — The next level consists of comprehending or understanding. The filtered message assumes a meaning. This activity can also be described as absorption or assimilation. The listener understands what the speaker has tried to convey. The message received has been heard, sensed, filtered and interpreted. In doing so, the listener has brought

into play the listener's own knowledge, experience, perception and cognitive power. The listener has used not only the body, but also the intellect in grasping the meaning of the message. The verbal message apart, the non-verbal communication has also been studied and noted.

(d) Remembering Messages received are, quite often, not just for immediate consideration and action, but also for future use. Although the absorption takes place in the present, its use may take place some time in the future. Memorizing the message, therefore, assumes significance. Remembering relates to a process whereby the assimilated message is stored in memory to facilitate future recall.

(e) Responding Response of the listener may take place at the end of the verbal communication or even earlier. When it is intended to provide feedback to the communicator, response occurs towards the end. If however, there is a need to seek clarification or a need to empathize with the speaker, it may take place earlier. This may take the form of prodding, prompting or reassuring that the message is being well received.

Together, these ensure that the listening part of the communication process becomes meaningful and effective.

TYPES OF LISTENING INTENSITY

All listening is not of the same intensity. Listening can be of four types. They are combative or competitive listening, passive listening, selective listening and active listening.

Combative/Competitive Listening

This happens when we are interested in voicing or putting forth our own views rather than understanding or exploring someone else's view. We listen mainly to interupt or attack the speakers views. We look for flaws and weak points. We impatiently wait to talk, rebut or argue.

Passive Listening

Passive listening refers to inert or indifferent listening. There is no conscious effort to receive and absorb the message. Quite often, passive listening stops at hearing and there is no effort to further process the message. The listener is physically present but is not participating actively in the process of communication. Listening in this instance is insufficient. The message is not absorbed and the passive listener will not be in a position to remember and recall the message at a future date. Passive listening takes place when the listener or receiver is constrained by various physiological and psychologically factors. It may be fatigue, ill health, disregard for the speaker or lack of interest in the subject. It also occurs when the speaker fails to meet the receiver's wavelength. Passive listening leads to misunderstandings for the communicator who would be under the impression that the receiver has grasped the message as intended.

Selective Listening

Another type of listening that is quite common is selective listening. Listening is done partially or selectively. People listen to only that which they want to listen to. Under this type of listening, the receiver keeps tuning in and out. Attention is not focussed. The listener lets the mind wander and the message is not thoroughly processed. Selective listening takes place when the receiver is not in a position to concentrate, or considers the speaker to be not so well informed on certain matters, or the receiver considers himself to be better informed than the communicator or such other reason which hinders active listening.

Active Listening

Active listening is the most desirable type of listening. It is also called reflective listening. In this case, the listener makes conscious efforts to listen attentively, decode the message and absorb it through a participative process. The receiver of the messages shows regard for the speaker, concentrates on what is being conveyed, motivates and prompts the speaker to meaningfully deliver the message. When we talk of listening skills, what is meant is the ability to listen effectively. When one listens actively, one not only comprehends the message, but is also in a position to remember and recall the same as and when required.

Guidelines for Listening Skills

Active listening is being receptive to the speaker and showing that you are listening. This not only increases your concentration but encourages the other person to continue talking. You practise active listening by checking your understanding from time to time, summarizing and clarifying points of disagreement. Guidelines for listening skills are set out below.

	The Active Listener	**The Passive Listener**
Body Language	Adopts positive posture; avoids distracting mannerisms; maintains reasonable eye contact; uses encouraging gestures and facial expression as appropriate maintains comfortable distance.	Looks bored or judgemental; doodles or fiddles distractingly; avoids eye contact; shows little response to what is being said.
Attention	Keeps attention focused on speaker: 'When that happened, what did you do?'	Keeps focus of comments on self: 'When something like that happens to me, I…'
Acceptance	Accepts speaker's ideas and feelings: 'That's an interesting idea. Can you say more about it?'	Fails to accept speaker's ideas and feelings: 'I think it would be better to …'
Empathy	Empathises: 'So when that happened, you felt that.'	Fails to empathise: 'I don't see why you felt annoyed.'
Questions	Uses 'open questions; probes in a helpful way: 'Could you tell me more about….?'	Uses closed questions; fails to probe.
Clarity and Clarification	Asks for clarification; checks understanding by paraphrasing, etc.	Assumes things; fails to clarify; fails to check understanding.
Summary	A summary progresses from time to time; widens range of ideas by summarizing a number of alternatives from which the speaker can choose.	Fails to summarise; narrows range of ideas by suggesting a 'correct' course of action.

Task I

Give detailed directions to your house and also speak out the complete address. Ask questions based on the directions given by you. [In class, the teacher may start this process and ask a few other students to repeat the same. The class may be divided into groups for this task.]

EXERCISE

1. Describe the process of listening.
2. What are the various types of listening intensity?
3. Write a short note on active listining.
4. What are guidelines to listening skills?

Think

1. In a telephonic conversation, how important is active listening. What all can you do to make the speaker or the person at the other end comfortable.
2. What all can't you do in a tele conversation vis-a-vis other regular face to face communication situations.

CHAPTER

43 Effective Listening

Kenneth Beare an ESL teacher says that acquiring listening skills is similar to starting a fitness training programme. Just as you cannot jog for seven miles on the first day, he says, you cannot learn listening skills overnight. So the best approach is to start in small steps and gradually increase and improve.

The English language is a stressed language and that is why some words are emphasised while others are quickly spoken. Many other languages are syllabic which means that each syllable receives equal importance.

In order to listen effectively, the listener has to look out for the tone, stress, inflection, enunciation and speed of delivery of the speaker.

Now, look at the sentences.

The teachers said, " the students are fools".

"The teachers," said the students, "are fools".

Read them aloud to bring out the meaning clearly. You will understand that the pause, intonation and stress while reading out the sentences will enable you to grasp the meaning clearly.

Task I

(a) Listen to TV News channels like Headlines Today, Times Now, BBC, NDTV for five to ten minutes.

(b) Listen to FM Radio, English news on Radio, Sports commentary on radio.

Can you make out any difference between what you hear and what you hear and see. Note the body language of the TV News Reader.

(c) Now watch sports channels like Star Sports, ESPN, TEN Sports etc. Can you hear the commentator bring excitement into the proceedings by modulating his voice.

Barriers to Effective Listening

For listening to be effective, it is also necessary that barriers to listening are removed. Such barriers can be physical, physiological or psychological. In other words, the barriers may be people related or otherwise. Physical barriers : Physical barriers would include low audibility level, extraneous noises and sounds, malfunctioning of the microphone and other mechanical devices, and frequent interruptions.

People related barriers People related barriers can be both physiological , psychological . Physiological barriers arise when the listener suffers from ill health, fatigue, sleeplessness, hearing problems and the like, which come in the away of good listening. It may also arise due to the accent and pronunciation shortcomings of the speaker. Psychological barriers cover the value system and the behavioral aspects . It make also be on account of hierarchical differences. They may relate to bias against the speaker or the message, lack of credence about the source of communication, underestimation of the speaker and the speaker's ability, past experience and the like.

Here are some common sources of difficulty by the speaker

- Voice volume too low to be heard.
- Making the message too complex, either by including too many unnecessary details or too many issues.
- Getting lost, forgetting points or the purpose of the interaction.
- Body language or nonverbal elements contradicting or interfering with the verbal message, such as smiling when anger or hurt is being expressed.
- Paying too much attention to how the other person is taking the message, or how the person might react.
- Using a very unique code or unconventional method for delivering the message.

The sources of difficulty for the listener are

- Being preoccupied and not listening
- Being so interested in what you have to say that you listen mainly to find an opening to get the floor.
- Formulating and listening to your own rebuttal to what the speaker is saying.
- Listening to your own personal beliefs about what is being said.
- Evaluating and making judgements about the speaker or the message.
- Not asking for clarification when you know that you do not understand.

Effective listening calls for conscious efforts and mutual trust. The speakers should believe in the receiver's earnestness and vice versa. Efforts shoulkd be made by the speaker, listener, as well as the others concerned with the process of communcation to remove the barriers that come in the way of effective communication.

TIPS FOR EFFECTIVE LISTENING

There are certain well-accepted essentials for good listening as follows;

1. Stop talking
2. Put the speaker at ease
3. Show you want to listen
4. Remove distractions
5. Empathize with the speaker
6. Be patient
7. Hold your temper
8. Refrain from arguments and criticism
9. Ask questions and elicit more information
10. Use eye contact and listening body language

Task 1

The teacher may ask two students to read out the conversations given below. Then class can answer the questions given at the end.

At the Educational Counsellor's Office

About TOEFL

Student : Can I have some details on TOEFL?

Counsellor : Well! TOEFL means Test of English as a Foreign Language. As the name suggests, it is for testing one's proficiency in English. A good score is mandatory for pursuing higher education in the U.S. or Canada.

Most universities there insist on a high score in TOEFL for even considering an application for admission.

Student : May I know who conducts and administers these tests?

Counsellor : TOEFL is administered by ETS—Educational Testing Service under the direction of a policy council. This council was set up and is affiliated to the College Board and to the Graduate Record Examination Board in the United States.

Student : Is the test paper-based or computer-based?

Counsellor : It was only paper-based earlier, but the computer adaptive test was introduced in July 1998. Well! Computer-based tests have become very popular and have spread to many parts of the world. Each individual testing station is equipped with computers and headphones.

Student : Oh! I see. Sir, May I know what does TOEFL comprise of, I mean, how many sections does it contain and what are they?

Counsellor : Well! There are four sections covering listening, structure, reading and writing. The listening section tests the candidates understanding ability of main ideas, supporting ideas, details and inferences. The answer choices appear after the candidate has seen and heard the questions. The structure tests the student's capacity in standard, written formal English. (Not the spoken variety) Reading section is to gauge the student's ability in comprehending the short passages similar to what is given in their syllabus. The candidate will have to answer the questions based on the passages.

Student : Is there any difference between the paper-based and computer-based question format?

Counsellor : Well! Unlike the paper-based TOEFL, the computer-based TOEFL has an adaptive listening and structure section. The candidate can change the answer as many times as he or she wants. But they cannot go back to the previous question. The answer to the previous question helps determine the difficulty level of the next question. Depending on the candidate's performance, the computer picks up the next question. Of course, answering the tough questions will yield more marks.

Student : What is the time duration for each section?

Counsellor : TOEFL is for four hours for all the four sections including the time spent on tutorials.

Student : What is tutorial?

Counsellor : The candidates view the tutorials on the test day. They get to know the different computer skills required to take the test and how to answer the paper.

Student : How many questions will there be in each section?

Counsellor : There are 30 to 50 questions in the listening section and the time allotted for it is 15 to 20 minutes. (This does not include the time taken to listen to the conversation and talks.) The structure section has 20 to 25 questions to be answered within 15 to 20 minutes and 44 to 45 questions in the reading section have to be completed within 70 to 90 minutes. Under the writing section, one must write an essay on a topic selected randomly from a pool of subjects within 30 minutes.

Student : Sir, how do I register for a test?

Counsellor : To register for TOEFL tests in India please contact, The Director, IPEM, 119/25 A, Mahatma Gandhi Marg, Allahabad, Uttar Pradesh-211001. You can also view their website: www.toefl.org for further details like phone number, e-mail address, etc.

Student : Thank you so much, sir, You have been very helpful and given me much of information.

Counsellor : You're welcome. Best of luck!

Answer the following questions.

1. What is the candidate asking for?
2. Who is giving the information?
3. Who administers the TOEFL?
4. What is the full form of TOEFL?
5. How many sections are there in the test and what are they?
6. What is the duration of each section?
7. How many questions are asked in each section?
8. What does the tutorial, given prior to the test, comprise of?

Task II : About Medical Transcription

Counsellor and Student

Student : Good morning, sir. My name is Ashok. I am a literature graduate. I am at the crossroads now, regarding my career. Could you help me out, sir?

Counsellor : Good morning. Please sit down. You have put forward your state of mind accurately. That's how most of the young people feel at this stage. Like being stranded at a junction! To begin with, tell me, what you have in mind.

Student : Sir, I would like to pursue higher studies. But, unfortunately, my mother, who is the sole bread winner of the family cannot bear the financial commitment involved. Hence, it's up to me to relieve her burden. I think the only way out is to learn a skill and start earning. I can also go in for distance learning for higher education once I start earning and can pay my fees on my own.

Counsellor : Splendid! Young man, I wish, other youth are as responsible as you are!

Well! Do you have any particular skill oriented profession in mind?

Student : Sir, I have been hearing a lot about Medical Transcription. Could you enlighten me on that?

Counsellor : Why not! I can surely brief you on it. You see, unlike the other career booms that have sprung up recently, the field of MT has grown stronger. For one thing, it requires skill to do the job and it has some growth potential too. The basic requirements are strong English

language, especially in grammar, a good ability to understand American accent, a good speed in typing and most of all a good grip on medical terminology.

Student : Sir, I have a good base in English and my grammar is quite strong. But I am not familiar with American accent nor do I have any clue about medical terminology. How do I get to learn them?

Counsellor : There are two ways. One option is to join a good MT training institution where they train you in English, Americanism along with practical lessons to listen to the doctor's dictation and type out, which in their term is to transcribe. They put you to various doctors' files to enable you to understand the accent variations. Of course, with practice, you develop speed and accuracy. This comes with a fee for 4 to 5 months of classes. They may help you also in placement. Americans demand perfection and the training enables you to learn the nuances of the medical transcription. The other option is joining a MT company as a trainee.

The selection process is through a stringent entrance test to test your English language standard. If you are selected, you are given a good training in Americanism, medical terminology and English grammar. They give you the maximum hours of practical transcription sessions till you progress to the 'live files'. This training generally goes on for four to five months. If you pass their various tests, they take you in as a trainee for a starting salary and then, if you are good, that is, if your accuracy is somewhere near 100%, you get a good salary and you get promoted to the position of an Editor. This is a sought after status among MTs. This way you can earn and learn a skill and with hard work, you will be able to pursue higher education too through distance learning. But, you have to put in a lot of hard work. You see, Americans are highly conscious about quality work with 100% accuracy and learning medical terminology is a tough deal too. Good transcription companies employ highly qualified trainers and doctors for English and Americanism, and medical terminology.

Student : Sir, looks like MT field is my cup of tea! I am not shy of hard work. You have been a great help, sir. You have guided me to zero on to this skill-oriented profession. Thank you so much, sir, and I am so grateful.

Counsellor : You're most welcome! You seem a determined young man. I wish you all success.

Student : Thank you for everything and good day, sir.

Answer the following questions.

1. Why does Ashok want to pursue a career to study further?
2. Why does the counsellor say that Medical Transcription is a skill-oriented profession?
3. What does a medical transcriptionist do?
4. Why should a medical transcriptionist learn American accent?
5. What will Ashok gain by taking up this profession?

EXERCISE

1. What are barriers to effective listening?
2. What are sources of difficulty for the speaker and the listener?
3. How can you overcome barriers to effective listening?

Think

The telephone rings while you are talking to a visitor. What is the most polite and professional thing to do.

CHAPTER

44

Listening to Fill-up Gapped Tests

An effective way to improve listening skills is to listen in to test with numbered gaps. These numbered gap passages are called cloze tests. The word 'cloze' means to complete a pattern. In cloze test, a passage may be given with blanks at regular intervals. The passage is followed by answer choices. Four or five choices may be given, of which the correct word has to be chosen to complete a sentence. This process is continued until all the blanks in the passage are filled up.

How to Answer Cloze Tests

A quick reading will give a basic idea of the passage. The second reading should be accompanied with a reading of the options given after the passage. If the correct answer is not immediately apparent, check if the options fit in with the meaning and the structure of both the sentence and the passage. Eliminate choices that do not clearly fit in the sentence. Use discretion and judgement to choose the correct option from the remaining choices.

Examples

In the following passage there are blanks, each of which has been numbered. Select from the words given below a word which is appropriate to fill in the blank.

Passage 1 Most experts agree that even people who think they are sleeping enough would ...1... be better off with more ...2... As evidence of a general sleep deficit, they ...3... the use of the bedside alarm clock used by people to ...4... their waking hours. The most relentless robber of ...5... is the complexity of every day life. Whenever pressures from work, family and community ...6... many people ...7... with sleep. Another ...8... of sleep is the concept of working in shifts. The ...9... of round-the-clock entertainment, especially all-night television, also takes its ...10...

1.	a. probably	b. meaningfully	c. attentively	d. mainly	e. suddenly
2.	a. work	b. freedom	c. rest	d. time	e. energy
3.	a. explain	b. overlook	c. ignore	d. prove	e. cite
4.	a. widen	b. prolong	c. disturb	d. minimize	e. improve
5.	a. sleep	b. pleasure	c. stress	d. leisure	e. motivation
6.	a. unite	b. diminish	c. happen	d. mount	e. disappear
7.	a. depend	b. detach	c. deprive	d. desist	e. dispense
8.	a. thief	b. study	c. contributor	d. product	e. drawback
9.	a. viewing	b. deficiency	c. availability	d. telecast	e. requirement
10.	a. toll	b. risk	c. credit	d. enjoyment	e. pressure

Passage 2 The British Cabinet Mission, which had come to India to work out a strategy for transfer of power, left without any success after a stay of more than three months. It had been a ...11... period of ...12... and sustained negotiations conducted in a ...13... heat of an Indian summer from which the Cabinet Mission could have derived no mental ...14... or physical relief. But they had not allowed their efforts to ...15... They ...16... tirelessly to find a solution to a near ...17... problem, ...18... all kinds of odds and difficulties. There was Sir Stafford Cripps on the one hand, with his ...19... energy and flashes of intellectual genius, and Lord Pethick-Lawrence on the other, with his ...20... practical outlook and undoubted sympathy for Indian aspirations—a combination which might surely have been expected to produce the results everyone had hoped for.

11.	a. strenuous	b. monumental	c. provocative	d. stupendous	e. remarkable
12.	a. intractable	b. excited	c. political	d. arduous	e. smooth
13.	a. powerful	b. boiling	c. simmering	d. disgusting	e. sweltering
14.	a. strain	b. consolation	c. recognition	d. achievement	e. confrontation
15.	a. sustain	b. abandon	c. strengthen	d. bolster	e. flag
16.	a. extracted	b. endeavoured	c. projected	d. followed	e. suggested
17.	a. insurmountable	b. invincible	c. uncontrollable	d. irrevocable	e. invaluable
18.	a. observing	b. maintaining	c. enduring	d. avoiding	e. eschewing
19.	a. inscrutable	b. irresistible	c. unattainable	d. indefatigable	e. unthinkable
20.	a. essentially	b. prominently	c. superficially	d. adequately	e. factually

Passage 3 Why is it that the CRPF, BSF and the Army give a better account of themselves than the state police? It is the structure of the state police that needs to be looked ...21... In a district or city, where there is a separate police force, a majority of the policemen are ...22... in police stations. The police station staff are often over-extended and no ...23... is available at that level. It is the state force that has to be called ...24... But it takes time to ...25... forces. If the law and order situation ...26... simultaneously at many places, there is manpower ...27... Thus once rioting breaks ...28... it takes time to bring it under control so that there is a time ...29... between the first incident and the appearance of the adequate force to ...30... the situation. The public hue and cry about the delayed arrival of the police force is not unjustified.

21.	a. on	b. at	c. into	d. through
22.	a. employed	b. deputed	c. deployed	d. detained
23.	a. squad	b. company	c. force	d. reserve
24.	a. on	b. at	c. up	d. upon
25.	a. prepare	b. mobilise	c. arrange	d. move
26.	a. aggravates	b. degenerates	c. proliferates	d. worsens
27.	a. failure	b. shortcoming	c. shortage	d. default
28.	a. out	b. off	c. in	d. away
29.	a. difference	b. interval	c. delay	d. lag
30.	a. prevent	b. step	c. restrain	d. control

Passage 4 Conventional medical wisdom does not advise taking ...31... vitamins as pills and capsules. On the contrary, there was a strong lobby which ...32... the supplementary intake of vitamins. This used to leave the ...33... person confused. However, modern research is ...34... a surprise. More and more scientists are beginning to ...35... that ...36... medical views on vitamins has been ...37... Evidence shows that ...38... extra vitamins play a role in assuring vitality and ...39... health than was ...40... thought.

31.	a. some	b. extra	c. insoluble	d. strong	e. all
32.	a. facilitated	b. criticised	c. communicated	d. projected	e. advocated
33.	a. medical	b. sick	c. scientific	d. average	e. educated
34.	a. trying	b. manufacturing	c. practicing	d. holding	e. inventing

35.	a. trust	b. consider	c. refute	d. forget	e. suspect
36.	a. indigent	b. all	c. traditional	d. modern	e. allopathic
37.	a. practical	b. limited	c. feasible	d. correct	e. confusing
38.	a. marketing	b. manufacturing	c. swallowing	d. taking	e. buying
39.	a. pleasurable	b. mainly	c. optimal	d. stronger	e. useful
40.	a. previously	b. occasionally	c. seriously	d. even	e. now

Passage 5 Most animals, including the great cats, do not ...41... man and they do their best to ...42... him. My brain turns round and round like a ...43.. at this odd behaviour. The explanation that the animals ...44... that man is a killer is ...45... convincing. To me, men are comparatively ...46... and defenceless. Animals are more agile and ...47... than man ..48.. his puny weapons. Nevertheless, it is a fact that animals ...49... avoid man. My view is shared ...50... other hunters that man has developed a defensive armour.

41.	a. prefer	b. admire	c. hate	d. like
42.	a. avoid	b. shirk	c. kill	d. overpower
43.	a. circle	b. cloud	c. wheel	d. whirlwind
44.	a. know	b. believe	c. feel	d. see
45.	a. unbelievably	b. generally	c. hardly	d. particularly
46.	a. strong	b. weak	c. powerful	d. fragile
47.	a. rapid	b. alert	c. brisk	d. docile
48.	a. with	b. along	c. accompanying	d. beside
49.	a. seldom	b. never	c. normally	d. occasionally
50.	a. with	b. by	c. along	d. among

Answers

1. a	2. c	3. e	4. c	5. a	6. d	7. e	8. a	9. c	10. a	11. a	12. d	13. e	14. b
15. e	16. b	17. a	18. c	19. d	20. a	21. c	22. a	23. d	24. d	25. b	26. b	27. c	28. a
29. d	30. d	31. b	32. e	33. d	34. d	35. b	36. c	37. b	38. d	39. c	40. a	41. d	42. a
43. d	44. c	45. c	46. b	47. b	48. a	49. c	50. b						

Additional Examples

Choose the following passages using choices given.

Passage 1 The ...1... of ear is vital. Only the writer whose ear is ...2... is in a ...3... to use bad grammar ...4...; this writer knows for ...5... when a colloquialism is ...6... than formal phrasing and is able to sustain the work at a ...7... of good taste. So ...8... your ear. Years ago, students were warned not to end a sentence with a preposition; ...9... of course, has softened that rigid ...10...

1.	a. silence	b. question	c. sound	d. noise
2.	a. careful	b. clear	c. righteous	d. reliable
3.	a. posture	b. role	c. position	d. vision
4.	a. wantonly	b. carelessly	c. surely	d. deliberately
5.	a. sure	b. certainty	c. name-sake	d. real
6.	a. best	b. better	c. worst	d. more
7.	a. degree	b. angle	c. level	d. palette
8.	a. cock	b. crow	c. tune	d. preen
9.	a. wine	b. experiences	c. learning	d. time
10.	a. rulings	b. law	c. decree	d. legislation

Passage 2 I ...11... a story of three claims. In a street there ...12... three hairdressing salons. The owner of one salon, ...13... any audit, simply claimed that ...14... was the " Best Hairdressing Salon in the City". ...15... this, his ...16... advertised that his was the "Best in the Country". The ...17... fellow, before making a ...18... did some benchmarking with the ...19... salons in the street, made a ...20... claim that his was the "Best in the Street".

11.	a. remember	b. hear	c. argue	d. discuss
12.	a. was	b. were	c. is	d. where
13.	a. with	b. beyond	c. without	d. betters
14.	a. he	b. theirs	c. truly	d. his
15.	a. Looking	b. Seeing	c. Watching	d. Feeling
16.	a. friend	b. enemy	c. competitor	d. rivalry
17.	a. second	b. first	c. third	d. best
18.	a. claim	b. saying	c. advertising	d. wish
19.	a. other	b. only	c. beautiful	d. rich
20.	a. honest	b. real	c. lost	d. verifiable

Passage 3 Successful ...21... is about understanding people and setting them to share the ...22... of the organisation. The manager must ...23... what is going on at all times and the ...24... must know what is ...25... of them. There is no ...26... for asking simple questions like what, why, when, how, how much. Listening carefully is the ...27... link in communicating with staff and clients. Of course managers need to delegate some ...28... of these tasks to team leaders, but as a manager, you are ...29... for all these areas. However, there are some things such as planning, team selection and rewarding achievements that should not be ...30... "A desk is a dangerous place from which to view your staff and clients".

21.	a. managers	b. leaders	c. management	d. emotion
22.	a. congrers	b. rewards	c. vision	d. spoils
23.	a. intuit	b. ferret	c. know	d. ask
24.	a. worker	b. labourers	c. employees	d. boss
25.	a. expected	b. nice	c. wanting	d. credible
26.	a. reason	b. substitute	c. answer	d. medicine
27.	a. unfortunate	b. distant	c. vital	d. chain
28.	a. crucial	b. vital	c. aspects	d. area
29.	a. responsible	b. leader	c. enough	d. important
30.	a. managed	b. delegated	c. given	d. allocated

Passage 4 Non-verbal communication is ...31... associated with the ...32... of observation. According to ...33..., the non-verbal part of communication has an overwhelming ...34.... It is said that less than 10% of the effect of a ...35... on an audience is accounted for by ...36.... Over 90% of the ...37... comes from the ...38... part. Here again about 50% of the effect is accounted for by the ...39... factors-appearance, dress, body language, facial expression, postures and gestures. Over 35% of the effect is ...40... for by the voice-tone, sincerity, modulation.

31.	a. nearly	b. closely	c. remotely	d. vaguely
32.	a. power	b. bane	c. beauty	d. source
33.	a. scientists	b. believers	c. researchers	d. journalists
34.	a. majority	b. dimension	c. power	d. impact
35.	a. speaking	b. listener	c. speaker	d. oration
36.	a. writing	b. words	c. tone	d. voice
37.	a. attribute	b. impact	c. effect	d. rapport
38.	a. verbal	b. written	c. facial	d. non-verbal
39.	a. visual	b. internal	c. audible	d. voice
40.	a. caused	b. accounted	c. tallied	d. made

Passage 5 You cannot ...41... all your goals by ...42.... Even a poet has to ...43... with editors and publishers. Unless you are a hermit, there is no ...44... you can get much done ...45.... So you work with ...46.... It ...47... out that collaboration is difficult. Robots on an assembly ...48... are ...49... to work together with ...50....; people are not.

41.	a. accomplish	b. set	c. organise	d. complete
42.	a. others	b. yourself	c. management	d. oneself
43.	a. edit	b. correct	c. work	d. act
44.	a. chance	b. luck	c. opportunity	d. way
45.	a. alone	b. yourself	c. individually	d. collectively
46.	a. teams	b. people	c. alone	d. others
47.	a. works	b. turns	c. figures	d. thaws
48.	a. plant	b. link	c. line	d. chain
49.	a. produced	b. manufactured	c. made	d. designed
50.	a. accuracy	b. bon homie	c. precision	d. good will

Passage 6 Crabs and lobsters are usually protected by their own ...51... shell, but hermit crabs live ...52... the discarded shells of some ...53.... They have two ...54... on their heads, and a ...55... of eyes on ...56... which they use for detecting ...57.... They use their large, strong ...58... to hold and tear food. ...59... lobsters, one of the claws usually has blunt knobs for ...60... victims and the other claw has sharp teeth for cutting.

51.	a. tough	b. thick	c. rocky	d. smooth
52.	a. outside	b. inside	c. in	d. holding
53.	a. lobsters	b. crabs	c. arthropods	d. molluscs
54.	a. aerials	b. antennas	c. antennae	d. anteriors
55.	a. couple	b. set	c. collection	d. pair
56.	a. heads	b. tails	c. stalks	d. stem
57.	a. prey	b. fish	c. weeds	d. enemy
58.	a. hands	b. legs	c. tentacles	d. pincers
59.	a. With	b. To	c. On	d. Inside
60.	a. wrestling	b. crushing	c. main	d. murdering

Passage 7 Rugby is a sport in which ...61... are allowed to carry, ...62... and throw the ball, although they may only throw it ...63.... ...64... are scored by touching the ball down over the opponents goal-line called a ...65... or by kicking it over the crossbar between the goal posts. The sport gets its ...66... from the ...67... school in England ...68... it was first played in 1823. The 'inventor' of the sport was William Webb Ellis, a ...69... at the school, who was the first player to pick up and run with the ...70... during a football game.

61.	a. teams	b. opponents	c. sides	d. players
62.	a. chuck	b. handle	c. kick	d. smash
63.	a. forwards	b. sideways	c. backwards	d. up
64.	a. Runs	b. Marks	c. Baskets	d. Points
65.	a. try	b. puck	c. punt	d. sort
66.	a. source	b. money	c. sponsor	d. name
67.	a. Eton	b. Rugby	c. Harrow	d. Oxford
68.	a. while	b. where	c. hence	d. were
69.	a. alumni	b. truant	c. pupil	d. victor
70.	a. ball	b. puck	c. bat	d. rugby

Passage 8 The electronic office is ...71... us, and far ...72... earlier promises of the ...73... of paper, we are ...74... in a sea of computer-generated reports and are ...75... under a ...76... avalanche of laser-printed mail and memos. ...77... of this stuff does not deserve a ...78... glance, but some of it is ...79... and ...80... to find a home.

71.	a. upon	b. beyond	c. over	d. onto
72.	a. to	b. off	c. on	d. from
73.	a. wastage	b. destruction	c. elimination	d. plight
74.	a. agog	b. awash	c. floating	d. drifting
75.	a. stoned	b. rocked	c. snowed	d. buried
76.	a. veritable	b. total	c. hopeless	d. enormous
77.	a. Any	b. None	c. Many	d. Much
78.	a. furtive	b. quick	c. first	d. second
79.	a. relative	b. germane	c. sincere	d. hopeless
80.	a. needs	b. cares	c. gives	d. backs

Passage 9 When it comes to the language of love, not all ears are ...81... equal. In a recent study ...82... listened to ...83... and non-emotional words through each ...84... The ...85... findings: Subjects had a 64% recall rate of emotional words ...86... in the left ear, 58% in the ...87... Why? Because the brain's right ...88..., the side that processes emotions better, is more sensitive to ...89... from the left ear. So if you want to play to someone's ...90... side lean to the left.

81.	a. created	b. perfectly	c. doctored	d. very
82.	a. chemists	b. volunteers	c. astrologers	d. research
83.	a. voices	b. songs	c. signals	d. emotional
84.	a. ear	b. syllable	c. note	d. chord
85.	a. statistics	b. graphic	c. preliminary	d. preface
86.	a. said	b. heard	c. ringing	d. listen
87.	a. left	b. centre	c. right	d. wrong
88.	a. side	b. working	c. angle	d. hemisphere
89.	a. signals	b. radiation	c. vibration	d. signs
90.	a. hard	b. heart	c. soft	d. right

Passage 10 ...91... most people of his time, Columbus believed the world was round and not ...92... It was already ...93... to reach countries like India by travelling East ...94... Europe, but he wanted to see if it was also possible to reach India by travelling ...95... In 1492 his first ...96... sailed west across the Atlantic and after 10 weeks ...97... San Salvador Island, in the Bahamas. Although he ...98... found the western sea route to India, Columbus was the first ...99... to have discovered what ...100... now known as the West Indies.

91.	a. Similarly	b. Like	c. Unlike	d. As
92.	a. oval	b. linear	c. flat	d. spherical
93.	a. impossible	b. easy	c. possible	d. simple
94.	a. to	b. from	c. of	d. and
95.	a. North	b. South	c. East	d. West
96.	a. travel	b. sojourn	c. expedition	d. boat
97.	a. of	b. reached	c. halted	d. finds
98.	a. never	b. often	c. belatedly	d. also
99.	a. American	b. European	c. foreigner	d. Indian
100.	a. was	b. is	c. became	d. are

Answers

1. b	2. d	3. c	4. d	5. a	6. b	7. c	8. c	9. d	10. c	11. a	12. b	13. c	14. d
15. b	16. c	17. c	18. a	19. a	20. a	21. c	22. c	23. c	24. c	25. a	26. b	27. c	28. c
29. a	30. b	31. b	32. a	33. c	34. d	35. c	36. b	37. b	38. d	39. a	40. b	41. a	42. b
43. c	44. d	45. a	46. d	47. b	48. c	49. d	50. c	51. b	52. c	53. c	54. c	55. d	56. c
57. a	58. d	59. a	60. b	61. d	62. b	63. a	64. d	65. c	66. d	67. b	68. b	69. c	70. a
71. a	72. d	73. c	74. c	75. d	76. d	77. d	78. d	79. b	80. a	81. a	82. b	83. d	84. a
85. c	86. b	87. c	88. d	89. a	90. c	91. c	92. c	93. c	94. c	95. d	96. c	97. b	98. a
99. b	100. b												

MODEL TEST

Complete the following passage using choices given.

Passage1 Primitive man was ...1... more concerned ...2... fire as a source of warmth and as a means of cooking food than as a source of light. ...3... he discovered less laborious ways of making fire, he had to ...4...it, and ...5... he went on a journey he carried a fire-brand with him.

1.	a. perhaps	b. probably	c. presumably	d. supposedly
2.	a. of	b. in	c. with	d. at
3.	a. As	b. No sooner	c. As soon as	d. Before
4.	a. keep	b. retain	c. preserve	d. conserve
5.	a. whenever	b. wherever	c. however	d. some

Passage 2 The world economy is in recession; the deepest and the widest ...6... the 1930s. There are ...7... of ...8... in the industrial countries, but most serious economic ...9... anticipate that rates of ...10... and level of economic activity will remain low. In all that has been written about world ...11... the ...12... has been overwhelming and narrowly economic. Few have ...13... the human consequences in more than a superficial manner. Not a single international study has ...14... the recession's ...15... on the most vulnerable half of the world's population, i.e., the children.

6.	a. by	b. for	c. in	d. since
7.	a. glimpses	b. risks	c. studies	d. tips
8.	a. development	b. downfall	c. recovery	d. slackness
9.	a. analysts	b. findings	c. journalists	d. surveys
10.	a. growth	b. inflation	c. interest	d. progress
11.	a. development	b. economy	c. recession	d. wars
12.	a. aim	b. emphasis	c. glimpse	d. supposition
13.	a. delved	b. investigated	c. propagated	d. taught
14.	a. analysed	b. highlighted	c. prepared	d. understood
15.	a. analysis	b. impact	c. overtures	d. undercurrents

Passage 3 A university stands for humanism, reason and the adventure of ideas. It stands for onward ...16... of the human race ...17... higher objectives. If the universities ...18... their duty adequately, then it ...19... well within the nation and ...20... people. But, if the temple of learning itself becomes a home of narrow bigotry and petty objectives, ...21... will the nation prosper?

16.	a. progress	b. march	c. motion	d. none
17.	a. on	b. for	c. towards	d. onwards
18.	a. obey	b. discharge	c. finish	d. drain
19.	a. will be	b. was	c. is	d. would be
20.	a. the	b. her	c. their	d. them
21.	a. when	b. why	c. how	d. now

Passage 4 The library, if used properly is invaluable in helping you develop discernment. It is rich ...22... information that goes far beyond the ...23... of any one text book or course. ...24... your textbook author does not make a particular ...25... clear and you feel the need ..26.. another description in greater detail ...27... in other words, go to the library and ...28... other books on the subject. By calling ...29... two or three writers dealing with the ...30... topic, you will find some ...31... of certain facts. In seeking additional sources, you will have gained immeasurably, for you will have seen what several experts perceive as being particularly important on a common subject.

22.	a. of	b. for	c. in	d. with
23.	a. pages	b. limits	c. confines	d. limitations
24.	a. If	b. While	c. When	d. Suppose
25.	a. information	b. entry	c. explanation	d. point
26.	a. for	b. of	c. to	d. about
27.	a. or	b. but	c. though	d. however
28.	a. verify	b. identify	c. check	d. collect
29.	a. for	b. up	c. forth	d. upon
30.	a. actual	b. specific	c. correct	d. same
31.	a. description	b. clarification	c. explanation	d. evidence

In the following passage, some words or phrases are italicised. Each of these words/ phrases are serially numbered. These serial numbers are reprinted under the passage. Find out the choice of words which can correctly substitute the italicised word in the passage. If the word/group of words is correct as it is and no correction is required, give 'no correction required' as your answer.

Passage 5 What looks very much like genocide *has been* ...32... taking place in Rwanda. People are pulled on ...33... cars and buses, ordered to *defer* ...34... their identity papers and then killed *on the spot until* ...35... they belong to the wrong ethnic group. Thousands of bodies have *already given* ...36... up, and the *peace* ...37... continues despite the *present* ...38... of 1700 UN peace keepers.

32.	a. were not	b. will be	c. would be	d. have never been	e. no correction required
33.	a. from	b. out	c. to	d. within	e. no correction required
34.	a. show	b. dissolve	c. stand	d. forget	e. no correction required
35.	a. then	b.why	c. if	d. again	e. no correction required
36.	a. piled	b. stood	c. woken	d. gone	e. no correction required
37.	a. life	b. future	c. killing	d. understanding	e. no correction required
38.	a. lifelong	b. recurrence	c. followers	d. presence	e. no correction required

In the following passage, at certain points you are given a choice of three words marked a., b. and c. Choose the best word from these three.

Passage 6 The World Bank will take a decision soon on whether to continue supporting the Sardar Sarovar dam on the Narmada, which the former has been funding...39... it was launched. An internal ...40... of the Sardar Sarovar project ...41... by the Bank, following protests...42... some environmental groups, is ...43... completion and its Board ...44... expected to decide in May or ...45...1993, whether to continue funding the ...46... The Bank's Vice President for sustainable development, Ismail Serageldin, ...47... commissioned the review, will make ...48... recommendations to the Board soon, according to World Bank sources here.

39.	a. as	b. since	c. when
40.	a. assessment	b. opinion	c. examination
41.	a. commissioned	b. launched	c. constituted
42.	a. against	b. of	c. by
43.	a. getting	b. nearing	c. having

44.	a. was	b. is	c. had been
45.	a. April	b. August	c. June
46.	a. effort	b. project	c. people
47.	a. whom	b. who	c. whose
48.	a. appropriate	b. approximate	c. proportional

Passage 7 The cities are ...49... up and as a result urban unemployment steadily grows. Probably there is an equal measure of ...50... in the countryside. The poorest quarter of the population in developing lands ...51... being left almost entirely behind in the vast ...52... of the modern technological society. The "marginal men", the ...53... strugglers for survival on the ...54... of farm and city, may ...55... more than two billion. Can we ...56... for any human order surviving with so ...57... a mass of ...58... piling up its base?

49.	a. piling	b. filling	c. growing	d. developing	e. enlarging
50.	a. worklessness	b. shortage	c. imbalance	d. employment	e. diversity
51.	a. believes	b. condemns	c. suffers	d. risks	e. endeavours
52.	a. struggle	b. surface	c. result	d. abundance	e. transformation
53.	a. brave	b. aged	c. wretched	d. ultimate	e. honest
54.	a. fringes	b. ground	c. surface	d. background	e. environment
55.	a. account	b. project	c. extend	d. mount	e. number
56.	a. hope	b. suspect	c. question	d. imagine	e. argue
57.	a. little	b. far	c. gross	d. long	e. many
58.	a. population	b. misery	c. generation	d. degradation	e. humility

Passage 8 Nations which have ...59... upon programmes of economic development often run into unsuspected barriers which threaten, and often ...60... the...61... needed growth of the economy. Industrialisation ...62..., productivity fails to respond and the nations' goals of raising standard of living for its people are ...63...

59.	a. decided	b. progressed	c. insisted	d. embarked	e. initiated
60.	a. active	b. deteriorated	c. halt	d. cut	e. enlighten
61.	a. positively	b. hopefully	c. alarmingly	d. deceptively	e. desperately
62.	a. falters	b. deviates	c. fluctuates	d. lowers	e. dissolves
63.	a. postponed	b. frustrated	c. suspended	d. criticised	e. fulfilled

Passage 9 Some scholars were exploring the forests of Middle America. They discovered, during their exploration some buildings which were in ruins. These buildings were ...64... ruined by the encroaching forest. It was also clear that these buildings were no ordinary structures. They were remnants of a ...65... civilisation. The scholars got interested. They excavated more and discovered ...66... their utmost surprise the remains of a flourishing civilisation - the Maya's ...67... they named it. Thus, it was as late as in ...68... 19th century that the secrets of a new civilisation were ...69... For some time the scholars believed that the Mayans must have ...70... the descendants of ancient Egyptians or one of the lost tribes of Israel; or perhaps a brand of the South East Asia's immigrants. However, they could not come to unanimous decision. Nonetheless, the fact remains that even today the Mayan culture is one of ...71... most fascinating ancient civilisations.

The civilisation was situated in the ...72... of Middle America. It covered an area equivalent to France, ...73... spread across Guatemala, Belize and some parts of Mexican Honduras. It started in 2500 BC and continued its progress till ...74... later. Throughout its period of progress, the people struggled against the invading ...75... They used to burn the plants and make the land ...76... for cultivation. Their staple food was maize. But even while ...77... for existence, they found time to build remarkable buildings for ...78... they used mortar, sandstone and volcanic rock. The buildings do tell us about the technological advances they had attained.

64.	a. reasonably	b. surely	c. apparently
65.	a. ordinary	b. new	c. great
66.	a. to	b. at	c. for
67.	a. when	b. as	c. while
68.	a. at	b. then	c. the
69.	a. unparalleled	b. unearthed	c. unmatched
70.	a. been	b. become	c. being
71.	a. an	b. a	c. the
72.	a. head	b. heart	c. tail
73.	a. and	b. yet	c. but
74.	a. years	b. centuries	c. decades
75.	a. civilisation	b. enemies	c. forests
76.	a. fertile	b. struggling	c. properly
77.	a. fighting	b. struggling	c. doing
78.	a. that	b. which	c. it

Passage 10 The average new born …79… is about fifty centimeters long. In twenty years this little …80… more than triples …81… in length. The …82… height of a man is 1.7 metres …83… man does not stop growing then …84… continues to grow even after the …85… of twenty five and reaches his maximum …86… at about the age of thirty five. …87… happens after that? He does not …88… stop growing but begins to shrink …89…. An average person shrinks as much as ten millimetres …90… ten years after the age of forty.

79.	a. baby	b. child	c. infant	d. kid
80.	a. mass	b. body	c. child	d. infant
81.	a. around	b. itself	c. over	d. himself
82.	a. mean	b. common	c. average	d. usual
83.	a. since	b. however	c. yet	d. though
84.	a. man	b. they	c. men	d. he
85.	a. age	b. ages	c. years	d. period
86.	a. length	b. growth	c. stature	d. height
87.	a. What	b. Something	c. Which	d. How
88.	a. then	b. however	c. merely	d. just
89.	a. the	b. an	c. every	d. now onward
90.	a. usually	b. in	c. after	d. every

Answers to Model Test

1. b	2. c	3. d	4. c	5. a	6. d	7. c	8. c	9. a	10. a	11. b	12. b	13. b	14. a
15. b	16. a	17. c	18. b	19. a	20. b	21. c	22. c	23. c	24. a	25. d	26. a	27. a	28. d
29. d	30. d	31. b	32. e	33. a	34. a	35. c	36. a	37. c	38. d	39. b	40. a	41. a	42. c
43. b	44. b	45. c	46. b	47. b	48. a	49. b	50. c	51. d	52. a	53. d	54. a	55. e	56. a
57. c	58. b	59. d	60. d	61. e	62. a	63. b	64. c	65. c	66. a	67. b	68. c	69. b	70. a
71. c	72. b	73. a	74. b	75. c	76. a	77. b	78. b	79. a	80. b	81. b	82. c	83. b	84. d
85. a	86. d	87. a	88. d	89. d	90. b								

CHAPTER 45

Spoken English and Listening Practice

The dialogues below can be used for practising spoken english as well as a Listening Exercise.

Task I : One Night at the Call Centre

A JOURNALIST AND THE PUBLIC RELATION OFFICER AT A CALL CENTRE

J : What does the term call centre mean?

PRO : Call centre is a multi-faceted work-place where various functions occur like customer service centers, information lines, reservation centres, help desks, etc. It is a sophisticated voice operations environment that provides a full range of high-volume, call-handling services (inbound and outbound) including, directory assistance, multilingual customer support, credit card services, operator services, interactive voice response and web-based services.

J : What size of accommodations is preferred by the call centres?

PRO : Call centres prefer large accommodation depending on their work load and customer base.

J : How large or small is the call centre's work force and personnel costs?

PRO : The size of the work force depends on the functions of the centre. If it is a centralised call centre that handles various functions and their work force is large, then the personnel costs are the most significant.

J : Could you tell us about the technology they use?

PRO : The call center's technologies include Automatic Call Distribution (ACD), Interactive Voice Response (IVR), Computer Telephony Integration (CTI), which allows the actions of the computer to be synchronised with what is happening on the phone. They employ Customer Relationship Management (CRM) technologies and other database systems too.

J : What types of calls do the call centres handle?

PRO : Types of calls are often divided into outbound and inbound. Outbound calls are those, which the agent initiates to a customer with the aim of selling a product or a service to that customer. Inbound calls are initiated by the customer to obtain information, report a malfunction or ask for help.

J : How are the staff organised?

PRO : The staff of the call centre are organised in tiers. The first tier consists of unskilled workers who are trained to resolve issues using a simple script. If the first tier is unable to do so, then issue is transferred to a more skilled second tier. In some cases, there may be a third tier of support too.

J : Do the call centres get criticised and if so, for what?

PRO : Yes, they do. Some critics say that the work atmosphere in such an environment is below human standard. Some criticise about the low rates of pay and the other constrains put on the staff by the employers. For example, the restriction of time that a staff can spend in the toilet. Apart from that, the callers complain about the skill level of the staff and their inability in solving the problem for which the customer calls.

J : Could you tell us about why there is a trend to move call centres to India?

PRO : One reason is the large number of English speaking workers available who can be employed cheap. Also, Indian technology is good and infrastructure is cheap.

J : What does the future hold for call centre employment in India?

PRO : According to the survey conducted by the Employment Cell of India, call centres are going to be the largest job providers in India. The Rs.81,000 crore industry including other IT-enabled services is expected to generate 20,00,000 jobs by 2008. The future looks good for the call centre industry because India has a large number of graduates and undergraduates with good command over English, Indian technology is good and infrastructure is available cheap and also effectively trained manpower which is the backbone of a call centre.

J : How is an Indian call centre executive's work rated?

PRO : Indian call centre executives take 8 to 10 minutes in processing their call, whereas call centre executives in the U.K. and the U.S. take 12 to 15 minutes to perform the same task. This saves time and increases efficiency levels. Indians have neutral accent and easily understandable English accent compared to people in China and other countries.

J : Thank you very much for giving us your valuable time and information.

PRO : You're most welcome. Let me also thank you for taking your time to gather information on call centres. Hope to see the write up in your publication.

J : You're welcome. We will send you a copy of our journal in which the article gets published. Good day, sir.

PRO : Good day!

Fillers Used

Nil.

Word Study

Sophisticated (adjective) 1) Knowing and understanding a lot about a subject, 2) Knowing a lot about things such as culture, fashion and modern work, 3) Complicated and advanced in design.

Rationalise (verb) 1) To try to find a reasonable explanation for behaviour that is not reasonable or suitable, 2) To make an organisation more effective for example, getting rid of some staff.

Synchronise (verb) To make two or more things happen or move at the same time or speed.

Virtual (adjective) 1) Almost the same as the thing that is mentioned, 2) Computing created by computers or appearing on computers or the internet.

UNDERSTANDING THE CONVERSATION

1. Who is asking for information from whom?
2. How are the types of calls divided?
3. What does the survey conducted by the employment cell of India point out?
4. How long does the Indian call centre executive take to process his/her call?

FORM QUESTIONS FOR THE FOLLOWING STATEMENTS

1. There has been a trend to move call centre jobs to India.
2. Some critics argue that the work atmosphere is below human standard.
3. These offices are often very large.
4. Yes, the term call centre can be misleading.
5. A call centre executive's job is multi-faceted.

EXERCISE

Choose the proper word from each pair in the parentheses below to make correct sentences.

1. (Sit, Set) the coffee cup on the table before you (sit, set) down.
2. The Taj Mahal is of (incomparable, uncomparable) beauty.
3. The (ophthalmologist, optometrist) will soon be operating on the cataract in my mother's right eye.
4. Tennis is the (vocation, avocation) of a professional tennis player.
5. (Shall, will) it be hot today?
6. A magician should be somewhat (incredible, incredulous).
7. I taught the monkey to (lay, lie) down and roll over.
8. She didn't mean to (infer, imply) that you are not a good writer.
9. He felt (badly, bad) when I thought he had insulted me.
10. I don't know why you don't (let, leave) Rani go to college by herself at her age.
11. The manager didn't put it in writing, but I had his (verbal, oral) approval
12. How did they get (in, into) this predicament?
13. Let's get away from the (maddening, madding) crowd.
14. This garden has (luxuriant, luxurious) growth of flowers.
15. His work for the company has been most (credible, creditable, credulous).
16. A friend in need is a friend (in deed, indeed)
17. Cheating in an examination is (contemptible, contemptuous)
18. She hates his (continual, continuous) comments.
19. Did Ann say (if, whether) she likes the idea or not?

Skit Write · · ·

You are attending a job interview at a call centre. The recruiting manager is interviewing you. Write a skit.

You : Good morning, sir.

RM : _____, please_____ . Can you_____ ?

You : Sir, I am post graduate in _____ . But I have_____. I am a fresher.

RM : Oh! That's_____ . We_____ also._____ do you know you_____ in night shifts?

You : I have_____, sir. I live_____ .

RM : In that case , please write a test now and let's see what can we do.

You : Very kind of you, sir, should I go somewhere to_____ test?

RM : Yes, please go to the room there. After writing the test, _____ , We will tell you the result. Good_____ .

You : _____ .

Task II : Options in Higher Education

A GROUP OF STUDENTS AND A STUDENT COUNSELLOR AT A COUNSELLING SESSION

SC : Good evening, students. The focus on education has been mainly on professional courses. But today we are going to concentrate on fields other than the professional courses. Please feel free to ask me any questions.

Ram : That's the need of the hour, ma'am. Thank you very much.

Mary : Ma'am, how does one choose a specific field of specialisation at graduate level, I mean based on what?

SC : Well! Selection of the chosen field should surely be based on one's aptitude and the chosen stream at the plus two level. For instance, one requires interest in enhancing one's knowledge level through research for science subjects.

Ann : Ma'am, does a graduate of physics have many options?

SC : Surely! A physics graduate has several opportunities in the following subjects like astro-physics/ space science/solid-state/molecular and nuclear physics.

John : What about graduate students of chemistry?

SC : Well! Technological advances greatly depend on chemistry and its applications. Options are open in biochemistry,sugar/food/dietetics/petroleum/cellulose/oil/paper technology/pharmaceuticals/ cosmetics/fertilizers and criminology. One can also study further on organic/inorganic/analytical chemistry.

Ann : What about graduates of mathematics?

SC : Mathematics is the base of many science subjects and economics. Management subjects require statistical analysis. Mathematics play an important role in computer applications and operations research.

Ram : Could you tell us about the opportunities in biological sciences?

SC : Well! The growth in the field of biological sciences is enormous! In the earlier times, biological sciences meant study of botany and zoology.

Biotechnology is the most significant and fast growing branch of science now. It has important applications in agriculture, environment, genetics, and medicine. The students who take up the study of this subject must have an aptitude for research.

John : Who scan apply for this course?

SC : Students from both physical and biological streams can take up this course.

Ram : Is genetics a related subject?

SC : Yes. Genetics is a closely related subject that offers tremendous opportunities in research now and more in future.

Ram : Could you tell us about bioinformatics?

SC : Bioinformatics is a combination of biotechnology and information technology.
The high growth in biological information can only be handled with the help of information technology. But the study of bioinformatics will suit only those students who can take up long-term research.

Mary : What does microbiology deal with?

SC : Microbiology deals with the study of organisms such as algae, bacteria, fungi, protozoan and viruses. Study of the subject requires long-term research. There are many applications in the study of diseases, immunology, cytology, laboratories, pharmaceutical and agriculture.

John : Are there more specialisation under the discipline?

SC : Yes. There are specialisations such as, biophysics, biochemistry, biology, entamology, molecular biology, toxicology, plant breeding, fisheries, ornithology and aquatic biology.

Ram : May I know what does geology deal with?

SC : Geology is the study of earth and its composition, structure and physical properties. There are specialisations under the subject such as marine geology and geo-hydrology, petroleum geology and seismology.

Mary : Are there any other discipline under science?

SC : Yes. Some of them are anthropology, oceanography and meteorology.

Ann : Do the students of history have any opportunity for professional courses?

SC : Of course, they have. The avenues are archaeology, musiology, numismatics, epigraphy and archives.

Mary : What about students of economics?

SC : Well! Economists have openings in banking industry, planning cells, business journals, etc. where economic analysis is required.

Ram : Students of psychology?

SC : Students of psychology have options to work as clinical/educational/industrial psychologists counsellors and psychometrists.

John : What do we need to study to enter social work?

SC : You need training in sociology, social work and psychology. Social work in different areas like community/medical/baby care and family welfare have many openings.

Ann : What about language studies?

SC : Learning languages has its own importance. Proficiency in any foreign language will get you opportunities to work as interpreters, translators, tourist guides and also as specialists in diplomatic service.

Ram : Can graduates of any discipline enter any other area?

SC : Oh! Yes. Teaching, journalism, law, fashion designing, film and T.V. management, library and information science, special education and sports coaching.

Students: Thank you so much, ma'am, you have given us a lot of information.

SC : You're most welcome. But to succeed in any chosen field, you need to have confidence, willingness to put in hard work, and an aim to reach the top.
Good luck!

Fillers Used

Well! I mean, surely! Oh! Of course!

Word Study

Phenomenon (noun) singular, phenomena – plural 1) An event or situation that can be seen to happen or exist, 2) Someone or something very impressive or surprising.

Ornithology (noun) The scientific study of birds.

Seismology (noun) The scientific study of earth quakes.

Genetics (noun) Relating to genes and the study of them.

Entomology (noun) The scientific study of insects.

UNDERSTANDING THE CONVERSATION

1. What is the focus of education these days?
2. What is the 'need of the hour' as per Ram?
3. What is ornithology?
4. What options does a student of psychology have?
5. What is bioinformatics?

FORM QUESTIONS FOR THE FOLLOWING STATEMENTS

1. We need confidence, willingness to put in hard work, and a dream to succeed in any field.
2. Students who take up the study of genetics should have an aptitude for research.
3. Advances in technology depend greatly on chemistry and its applications.
4. Mathematics acts as a basic tool in many of the science subjects and economics.

EXERCISES

A. Choose the proper word or words from the parentheses to make a correct sentence.

1. My son has (grown, grew) a lot this year.
2. Have you (drew, drawn) your salary yet?
3. Have you ever (swum, swam) in the river?
4. Have they (eaten, ate)?
5. Meena said she (think, thought) of me yesterday.
6. I am so sorry but I have (forgot, forgotten) your name.
7. The farmer (dug, dugged) the yam before the rains.
8. We have (done, did) it again.
9. I (have saw, saw) it.
10. I (have seen, seen) it.
11. You (wrote, have written) it well.
12. He has (driven, drove) 100 miles today.

B. Choose the proper word from the parentheses to make a correct sentence.

1. All were invited to the wedding but (we, us).
2. Try to behave like (him, he)
3. This should be very confidential between you and (I, me).
4. You came after (she, her).
5. What has she got against Ram and (I, me).
6. Please buy an ice cream for (she and I/her and me).
7. Your sister is pretty and I wish you are more like (she, her).
8. What would you women do without (us, we) men?
9. This should be settled between the house owner and (I, me).
10. Why do you try to copy (him, he)?
11. All my colleagues attended the party except (they, them).
12. Will you go shopping with Ann and (I, me)?
13. He arrived after (her, she).

Skit Write · · ·

Ramya and Maya have completed B.Sc. in Zoology and are discussing their future course of study.

Ramya : Hi, Maya! What are your future plans?

Maya : Haven't thought much about it. What about yours?

Ramya : Well! My mind is set on going for a masters in Microbiology. You see, I_____ to complete it and then go for my second masters in U.S. and go on to_____ in the field of Biotechnology there.

Maya : Wow! You have_____ . I am sure that's the best thing to do for us, the science students.

Ramya : If you think so great about it, why_____ join me?

Maya : No, Ramya, I can't. You see, my family_____ a foreign education for me.

Ramya : Well! Don't do it_____ . Why don't you finish your masters here and proceed with research in India itself? You are_____ , I am sure it won't be a problem for you.

Maya : Well! I suppose it is a good idea. Let me_____. Anyway, thanks very much_____ .

Ramya : No mention please. There is still time._____ .
Best of luck.

Maya : Same to you, Ramya._____ . Do you have my phone number?

Ramya : Yes, I do._____ . Meanwhile be seeing you and bye.

Maya : Bye.

B.E/B.TECH. DEGREE EXAMINATIONS –I YEAR ANNUAL PATTERN

MODEL QUESTION PAPER

Time : Three Hours | Maximum :100 marks

Answer ALL Questions

PART A 10 2 20

1. Match the words in column A with their meanings in column B: 4 ½ 2

A	B
(a) abundant	(i) rise
(b) escalate	(ii) reach its highest point
(c) cluminate	(iii) strikingly grand
(d) spectacular	(iv) plenty

2. Expand the following verbs into nouns by adding suitable suffixes: 4 ½ 2

(a) protect (b) attract
(c) purify (d) deplete

3. Fill in the blanks with suitable tense forms of the verbs given in bracket : 4 ½ 2

(a) The government _____ (give) more attention to the development of dry land now. A programme _____ (launch) for rain water harvesting in farm lands.
(b) It _____ (rain) since morning and it _____ (stop) only an hour ago.

4. Expand the following compound words: 4 ½ 2

(a) ozone depletion (b) network cable
(c) petrol engine (d) wind power

5. Fill in the blanks with the comparative forms of the adjectives given in brackets: 4 ½ 2

(a) Lead is _____ (heavy) than Aluminium.
(b) Platinum is _____ (precious) than Silver.
(c) Ravi is _____ (tall) than Suraj.
(d) Computer works _____ (fast) than calculator.

6. Change the following sentences into passive forms: 2 1 2

(a) The Electricity board is laying cables in every nook and corner of the city.
(b) The social welfare organisation gave a gift worth Rs. 1,000 to all Self Help Group.

7. Join the following pairs of sentences by using appropriate cause and effect expressions like *because, because of, due to* etc. 2 1 2

(a) The price of petrol has gone up. The essential commodities have become costlier.
(b) There is a significant lacuna in today's education. There is a lack of industry and academia collaboration.

8. Fill in the blanks with suitable prepositions: 4 ½ 2

Some _____ the major themes dealt_____ science fiction are space travel_____ and _____ other planets, solar systems and galaxies; exploration settlement and exploitation_____other worlds; encounters_____ or _____ extra terrestrial life forms.

9. Write a sentence definition for any 2 of the following: 2 1 2

(a) a dam (b) a library (c) a computer virus

10. Edit the following passage by correcting mistakes in spelling, grammar & punctuation: 2 1 2

Science fiction are one of the most popular form of litereture. It has a very wide reeding public its writers all over the world is trying to produse it.

PART B

Answer ALL Questions 5 16 80

11. Read the following passage carefully and answer the questions that follow it.

The latest buzz word in the continuing debate about the environment is '*sustainable management*'—that means using plants and animals for our own benefit, but ensuring that enough are left alive to guarantee the survival of the species. This sounds good, but is it practical in reality? In spite of years of scientific research, no-one really knows how much damage human beings are doing to their environment. We know that they are responsible for many problems ranging from global warming to ozone depletion, and there is no doubt that they have a devastating effect on animal and plant life on Earth.

About 50,000 animal and plant species are becoming extinct every year. All species depend in some way on one another for survival. If you remove one species from this complex web of interrelationships, we have little idea of the repercussions on the ecosystem in general.

What makes things more complicated is the fact that unlike global warming—which, if the political will was there, could be reduced by cutting gas emissions—preserving bio-diversity remains a difficult dilemma.

There are also questions about whether sustainable management is practical as far as protecting areas of great bio-diversity such as the world's tropical forests are concerned. In theory, the principle should be the same as with elephants; i.e. to cut a number of trees, but not so many as to completely destroy the forest.

Sustainable management of trees requires controls on the number of trees which are cut down as well as investment in replacing them. Most tropical forests exist in poor countries which depends on logging to make money. For most loggers in these countries, making money means cutting down as many trees as possible in the shortest time. The prices of trees remains stable, varying by 4-5% annually, whereas interest rates in most developing countries can create 15% or more in returns. It therefore makes little sense, and certainly no economic sense, to delay tree-felling.

One solution could be to insist that wood comes from sustainably managed forests. In theory, consumers would buy only this wood and force logging companies to go "green" or else out of business. Unfortunately, unrestricted logging is more profitable than wood from sustainably managed forests which would cost up to 5 times more to control. Consumers would not be prepared to pay the extra sum just to protect the environment.

The sad fact is that there is no practical solution to protecting vegetation and wildlife of tropical forests in the future. It is estimated that these forests contain anything from 50 to 90 per cent of all animals and plant species on Earth. In one study of a 5 km square area of rain forest in Peru, for example, scientists counted 1,300 species of butterfly and 600 species of bird. In the entire USA only 400 species of butterfly and 700 species of bird have been recorded. Sustainable management represents a gigantic experiment. If this doesn't work, we can't move to another planet to escape. It's a case of one planet, one experiment!

A. Complete the following statements choosing from one of the given alternatives. 6 1 6

1. The extent of the damage being inflicted on our environment ...
   (a) can be estimated by years of scientific research.
   (b) is being calculated by scientific research exactly.
   (c) is impossible to assess despite years of scientific research.
   (d) is, thanks to years of scientific research, on the decrease.
2. The term 'sustainable management' means using plants and animals for our own benefit, but...
   (a) assuring none are left alive to guarantee the survival of the species.
   (b) making sure that enough are left alive to guarantee the survival of the species.
   (c) take care of the survival of the species.
   (d) make certain they are not all used up.
3. If a particular species becomes extinct...
   (a) we know exactly what effect it will have on our ecosystem.
   (b) we have little knowledge about its effects on our ecosystem.
   (c) it has no relationship with other species in our ecosystem.
   (d) its removal from the ecosystem will have no repercussions.
4. Preserving bio-diversity in our ecosystem...
   (a) is less complicated than reducing global warming.
   (b) can be resolved politically, just like global warming.
   (c) is not simply a political dilemma to be resolved like global warming.
   (d) can be resolved only by cutting gas emissions.
5. Applying the theory of sustainable management to the protection of tropical forests...
   (a) is creating worries and doubts in people's minds, especially as regards its feasibility.
   (b) means you can cut as many trees as you want without destroying the forest.
   (c) is a practical and economical way of protecting them.
   (d) is exactly the same as that applied to protecting elephants.
6. It is vital to protect the wildlife of tropical forests...
   (a) because there are over 700 species of bird recorded in the whole of the USA.
   (b) because sustainable management offers a real, practical solution.
   (c) because scientists couldn't find as many species of butterfly or bird in the Peruvian rainforests.
   (d) because of the wide variety and quantity of species of wildlife that inhabit them.

B. Choose the option that best represents the meaning of the following words as they are used in the text. 6 1 6

1. depletion
   (a) fatigue (b) reduction (c) deficiency (d) emptiness
2. repercussion
   (a) sequence (b) purpose (c) consequence (d) conclusion
3. dilemma
   (a) predicament (b) hesitation (c) status (d) contingency
4. returns
   (a) grant (b) inhertance (c) acquisition (d) gain

5. devastating
   (a) extreme (b) diverse (c) diastrous (d) dangerous
6. complex
   (a) difficult (b) intricate (c) hard (d) tough

C. State whether the following statements are True or False $(4\times1=4)$

(a) Most of the tropical forests are located in economically backward countries.
(b) Tropical forests house less than half of the plant and animal species on earth.
(c) Human beings are not really responsible for the damage to the environment.
(d) Wood from sustainably managed forests is cheaper than wood from forests where unrestricted logging is permitted.

12. (a) Write a set of eight recommendations to preserve underground water resources.

(or)

(b) Write a set of eight instructions to protect the ozone layer.

13. (a) Respond to the following advertisement with your CV enclosed.

TVS–LUCAS requires
PRODUCTION ENGINEERS
Engineering graduates (Mechanical/Electronic/Electrical/Civil)
preferably with few years experience in production would be preferred.
Candidates should have good communication skills with leadership ability.
They also should have sound technical knowledge in their subject area.
Salary is not a constraint for deserving candidates.
Interested candidates should send your application with CV to
The Personnel Manager
TVS–Lucas
Hosur
Karnataka

(or)

(b) Write a letter to the Editor of your local newspaper about the problems in using city public transport buses. List out different problems you have encountered while travelling in buses and give few suggestions to improve the travel.

14. (a) Choose any one set of the following jumbled sentences and rearrange them in the right sequential order:

(i) The aim is to find out how much of these raw materials could be provided if a plant for recycling waste were built just outside the city.
(ii) All these ideas are already being made use of, but what is new is the idea of combining them on such a large scale in a single plant designed to recycle most types of waste.
(iii) A new concept of recycling waste is taking shape in the form of a project.
(iv) This plant would recycle not only metal such as steel, lead and copper, but also paper and rubber as well.
(v) The latest project is to take a city of around half a million inhabitants and discover exactly what raw materials go into it and what goes out.
(vi) Methods have been discovered, for example removing the ink from newsprint.
(vii) This would enable the paper to be used again.

(viii) Also through these methods, valuable oils and gases can be obtained from old motorcars and tyres from these methods.

(or)

(b)(i) Human beings can walk, run, swim, and so on, but robots are usually confined to one place.

(ii) Another advantage human beings have is the way the same person can do jobs as different as making a cup of tea or designing a new machine.

(iii) It is a known fact that robots have many advantages over human beings.

(iv) Taking into account all these factors, it should be remembered that robots owe their existence, to human beings.

(v) However, it is also true that humans can do many things that robots can't.

(vi) Even if the robots are able to move, they can do, only in a very limited way.

(vii) For example, humans can carry out a task without having to be told exactly how to do it; they don't have to be programmed.

(viii) And unlike robots, people can know whether what they are doing is good or bad, and whether it is boring or interesting.

15. Write an essay on any one of the topics in 300 words:

(a) Comment on the need to develop communication skills in the fast changing and competitive world we live in.

(or)

(b) Advantages and disadvantages of using internet.

B.E/B.TECH. DEGREE EXAMINATIONS, MAY/JUNE 2007

Annual Pattern — First Year

Time : Three Hours | Maximum : 100 marks

Answer ALL Questions.

PART A $(10 \times 2 = 20)$

1. Match the words in column A with their meanings in column B:

A	B
(a) objective	(i) unstable
(b) volatile	(ii) dangerous
(c) abundant	(iii) extensive
(d) hazardous	(iv) aim
	(v) plentiful

2. Change the following into impersonal passive :
   (a) Avoid cell phone while driving (b) Save enough money for future
   (c) Place the breaker on the desk (d) Apply science to solve human problems
3. Fill in the blanks with suitable tense forms of the verbs given in brackets :
   Thinking ahead _____ (be) the privilege given to man alone. Man _____(learn) from the past experience, _____ (analyze) the present and _____ (plan) for the future.
4. Form nouns from the following words using suitable suffixes:
   (a) amend (b) specific (c) inactive (d) generalize
5. Expand the following compound nouns :
   (a) information technology (b) energy source
   (c) video screen (d) recruitment procedure
6. Use TWO of the following expressions, showing cause and effect relationship in sentences of your own :
   (a) On account of (b) Because of (c) As a result of
7. Edit the following :

   Today a small peace of plastic enables you to make a telephone calls from anywhere in the world to anyone in the world. A mobile phone no biggest than a playing card would electronically transmit words to a computer screen, send a fax and receive replys on its tiny screen. Technology that was once science fiction is now with you.
8. Combine the following to indicate purpose :
   (a) He went to Harvard University. He got his M.S. Degree.
   (b) The scientist observed the sky. He discovered a new star.
9. Fill in the blanks with suitable prepositions :

   The ozone layer filters sunlight and prevents adverse ultraviolet radiation _____ reaching the earth's surface. The UV-B radiation is a harmful form _____ ultraviolet radiation_____ a wavelength _____ 280 and 320 nanometers.
10. Rewrite the infinitives as gerunds :
    (a) To train young graduates is easy (b) To visit China will open new avenues of business
    (c) To make mistakes is human (d) It is tiresome to stand in long queues.

PART B (5×6=80)

11. Read the following passage carefully and answer the questions given at the end of it: (1×16=16)

Professor Gavraud is an engineer who almost gave up his post at an institute in Marseilles because he always fell ill at work. He decided against leaving when he discovered that the recurrent attacks of nausea only worried him when he was in his office at the top of the building. Thinking that there must be something in the room that disturbed him, he tried to track it down with devices sensitive to various chemicals, and even with a Geiger counter, but he found nothing until one day, just as he was about to give up, he leaned back against the wall. The whole room was vibrating at a low frequency. The source of this energy turned out to be an air-conditioning plant on the roof of the building across the way, and his office was the right shape and the right distance from machine to resonate in sympathy with it. It was this rhythm, at seven cycles per second, that made him sick.

Fascinated by the phenomenon, Gavraud decided to build machines to produce infrasound so that he could investigate in further. In casting around for likely designs, he discovered that the whistle with a pea in it issued to all French gendarmes produced a whole range of low-frequency sounds. So he built a police-whistle six feet long and powered it with compressed air. The technician who gave the giant whistle its first trial fell down dead on the spot. A post-mortem revealed that all his internal organs had been mashed into a jelly by the vibrations.

Gavraud went ahead with his work more carefully and did the next test out of doors, with all observers screened from the machine in a concrete shelter. When all was ready, they turned the air on slowly — and broke the windows of every building within a half mile of the test site. Later they learnt to control the strength of the infrasound generator more effectively and designed a series of smaller machines for experimental work. One of the most interesting discoveries to date is that waves of low-frequency can be aimed and that two generators focused on a particular point even five miles away produce a resonance that can knock a building down as effectively as a major earthquake. These frequency -7 machines can be built very cheaply.

(a) Choose the correct answer : (4×1=4)

(i) Professor Gavraud fell ill because
- (1) there were chemicals in his room
- (2) his office was too high up
- (3) he was affected by vibrations
- (4) he was a very sensitive man

(ii) He constructed a very large copy of a police whistle because he wanted to
- (1) produce low-frequency sounds
- (2) improve its design
- (3) compare it with an organ
- (4) see the effect it had on people

(iii) The first experiment with the machine
- (1) caused a major earthquake
- (2) broke all the windows in nearby building
- (3) made a noise like an organ
- (4) killed the man who switched it on

(iv) Which of the following precautions was not taken by Professor Gavraud in his second experiment?
- (1) the observers were protected by a concrete shelter.
- (2) the experiment was done outside
- (3) the compressed air was turned on slowly
- (4) a smaller machine was used

(b) Mention whether the following statements are True or False : (6×1=6)

(i) Professor Gavraud left his job because he felt sick.
(ii) The cause of the sickness was not in his room.
(iii) The air-conditioning plant had nothing to do with his sickness.
(iv) The result of the first trial was worrying.
(v) He did his second test indoors.
(vi) Later on he designed even bigger generators.

(c) Choose the appropriate definition for the given words or phrases as they are used in the text : (6×1=6)

(i) Infrasound
(1) high frequency sound
(2) low frequency sound
(3) medium frequency sound
(4) heavy frequency sound

(ii) To track down
(1) to smell
(2) to detect
(3) to examine
(4) to remove

(iii) To give up
(1) to go on
(2) to stop
(3) to collapse
(4) to find out

(iv) Turned out to be
(1) was shown to be
(2) was intended to be
(3) was thought to one
(4) was known to be

(v) Casting around
(1) looking for
(2) hoping for
(3) asking for
(4) sending for

(vi) Went ahead
(1) delayed
(2) proceeded
(3) hurried
(4) changed

12. (a) Assume that you bought a laptop from a reputed company in your town. Within a week of its purchase, you find that it gives you trouble. Write a letter of complaint to the company asking for replacement of the laptop. (1×16=16)

(or)

(b) Imagine that you have paid your semester fees to your college. To your surprise you find that your name has been omitted from the roll. Write a letter to your principal explaining the problem and giving the details of your payment to the college. (1×16=16)

13. (a) Write a letter to the HRD Manager of Karur Vysya Bank, Anna Salai, Chennai – 600 017, applying for the post of System Manager. Add a separate résumé to your covering letter. (1×16=16)

(or)

(b) Write a letter to the editor of a leading English newspaper about the sufferings of office goers and school children who use the public transport. (1×16=16)

14. (a) Write a list of eight recommendations for improving health services in Government hospitals. (1×16=16)

(or)

(b) Write a list of eight instructions for maintaining houses in good condition. (1×16=16)

15. Given below are two sets of jumbled sentences. Rearrange ONE of them into a coherent paragraph: (1×16=16)

(a) (i) There are a lot of churches, and one or two really large interesting buildings, such as the Ashmolean Museum, the 'round' library, the Bodleian and the Radcliffe Camera, with its domed roof.

(ii) There is, in fact, quite a lot of industry in Oxford.

(iii) As you leave the centre and go towards the outskirts of Oxford you can see industrial estates and a car factory in one direction, and in another, attractive suburbs.

(iv) Like all English towns, there are parks, and 'The Parks' is the leafy home of university cricket in the summer months.

(v) Oxford is an exceptionally old university town, on the River Thames, about 60 miles from London.

(vi) In the centre you can also find interesting old stores and paved passages.

(vii) All around the crossroads at the very heart of Oxford, Carfax, there are grey stone colleges and other university buildings.

(viii) Unlike modern university towns, where you usually find the university on the edge of the town, or on its own campus, Oxford's centre is the university.

(or)

(b) (i) Near these, tucked into a corner, there is a children's playground with swings, seesaws and model vehicles.

(ii) One of the pleasant features of the park is the fact it is surrounded by trees.

(iii) On the other side of the park from the river there are more sports facilities, three tennis courts and a bowling lawn.

(iv) And there are flowerbeds with interesting shrubs and flowers.

(v) An attractive path runs beside the river.

(vi) On one side of the park, however, there is a patch of trees through which river winds.

(vii) As parks go, Mappin Park is large.

(viii) Most of the flat ground is taken up by three football pitches and two rugby pitches.

B.E/B.TECH. DEGREE EXAMINATIONS, 2007
FIRST SEMESTER
MODEL QUESTION PAPER

Time: Three Hours Maximum: 100 marks

Answer ALL Questions

SECTION I **(20´2=40 marks)**

1. Make antonyms of the following words by adding suitable prefixes.
   (i) Relenting (ii) Purity (iii) Sensitive (iv) Advantage

2. Match the words in column A with their meanings in column B.

	A	B
(i)	Radiation	Bringing together
(ii)	Trekking	Giving out rays
		Extended walking

3. Frame sentences using the given phrases.
   (i) Look after
   (ii) Adhere to

4. Fill in the blanks with suitable Prepositions.
   Very fast trains are safe compared _____ most other forms _____ motorized transport. For example, the TGV, which commenced operation _____ 1981, travels _____ 10 million kilometers each year.

5. Define the following terms.
   (i) Aerial (ii) Modem

6. Correct the following sentences using subject–verb agreement.
   a. The cost of the computers are dropping day-by-day
   b. Neither Raghu nor his friends knows the truth.

7. Complete the following sentences by using correct form of the word that agrees with the subject.
   a. Each of the suspected men _____ arrested.
   b. One must do _____ duty.

8. Fill in the blanks with appropriate form of the verbs.
   Rice husk _____ (obtain) from rice mills. It _____ (produce) in such a large quantity that its disposal sometimes becomes a problem. When it _____ (burn) under controlled temperature in a furnace it _____ (leave) a residue in the form of a highly reactive ash.

9. (i) Transfer the simple sentence into compound sentence.
   Besides being a teacher, she is a journalist.
   (ii) Change the following sentence into simple sentence
   Time which is lost is lost forever.

10. Fill in the blanks with suitable articles:
    a. Everyone respects _____ honest person.
    b. Copper is _____ useful metal.

11. Give the American English equivalents (word change/spelling) of the following British English words.
    a. Lift b. favour
12. Change into impersonal passive statements.
    a. He lubricated the ball-bearing
    b. We use the community-type hybrid solar cooker for cooking a large quantity of food.
13. Complete the following.
    a. If the engine is serviced regularly, _____
    b. _____ if the uranium is fissioned.
14. Correct the form of the verb in the following conditional clauses.
    a. If I went to Delhi today, I would have met my cousin.
    b. He would write the test, if he attends the classes regularly.
15. Fill in the blanks in the following sentences with the comparative forms of the adjectives given in brackets.
    a. The tiger is _____ (ferocious) than other nimals.
    b. Diesel costs _____ (little) than petrol.
16. Rewrite the following nominal compounds.
    a. No other metal is as useful as Iron.
    b. Chennai is one of the biggest cities in India.
17. Expand the following nominal compounds.
    a. Car battery b. Power transmission Problems
    c. Calculation speed d. Laser printer
18. Analyse the Sentence Pattern in the following:
    a. He is a doctor.
    b. He brought a book.
19. Edit the following passage:
    One of the world's source of energy are oil. We depend on it for using as fuel for transportation and generate of power. Crude mineral oil come out of the earth as a thick brown or black liqued with a strong smell. it is a complex mixtures of many different substance.
20. Describe the process of planting a sapling in your college.

SECTION II (5´12=60 marks)

Answer any FIVE Questions

21. Read the passage carefully, and then answer the following questions:
    Getting a chocolate out of a box requires a considerable amount of unpacking: the box has to be taken out of the paper bag in which it has arrived; the cellophane wrapper has to be torn off, the lid opened and the paper removed; the chocolate itself then has to be unwrapped from its own piece of paper. It is now becoming increasingly difficult to buy anything that is not wrapped in cellophane, polythene, or paper.

    The package itself is of no interest to the people, who usually throw it away immediately. Useless wrapping accounts for much of the heap of garbage in the streets. So, why is it done? Some of it, like the cellophane on meat is necessary, but most of the rest is simply for competitive selling. This is absurd. Packaging is using up resources and messing up the environment.

Little research is being carried out on the costs of alternative types of packaging. Just how possible it is, for instance, for local authorities to salvage paper, pulp it, and recycle it as egg boxes? Would it be cheaper to plant another forest? Paper is the material most used for packaging — but very little is recycled.

A machine has been developed that pulps paper then processes it into packaging, e.g. egg-boxes and cartons. This could be easily adapted for local use. It would mean that people would have to separate their refuse into paper and non-paper, with a different dustbin for each. Paper is, in fact, probably the material, that can be most easily recycled; and now, with massive increases in paper prices, the time has come at which collection by local authorities could be profitable.

Recycling of this kind is already happening with milk bottles, which are returned to the dairies, washed out, and refilled. But both glass and paper are being threatened by the growing use of plastic. More and more dairies are experimenting with plastic bottles. If all the milk bottles necessary were made of plastic, then British dairies would be producing enough plastic tubing, that would encircle the earth every five or six days!

The trouble with plastic is that it does not rot. Some environmentalists argue that the only solution to the problem of ever growing mounds of plastic containers is to do away with plastic altogether in the shops, a suggestion unacceptable to many manufacturers, who say there is no alternative to their handy plastic packs.

More research is needed for the recovery and re-use of various materials and for the cost of collecting and recycling containers as opposed to producing new ones. Unnecessary packaging, that is used just once, can be avoided. But it is not so much a question of doing away with packaging as using it sensibly. What is needed now is a more sophisticated approach to packaging. Let it be simplified to a considerable extent to minimize land pollution.

I. Choose the response which best reflects the meaning of the text.

(a) The 'local authorities' are
- (i) the town council.
- (ii) the police.
- (iii) the paper manufacturers.
- (iv) the most influential citizens.

(b) If paper is to be recycled
- (i) more forests will have to be planted.
- (ii) the use of paper bags will have to be restricted.
- (iii) people will have to use different dustbins for their rubbish.
- (iv) the local authorities will have to reduce the price of paper.

(c) British dairies are
- (i) producing enough plastic tubing to go round the world in less than a week.
- (ii) giving up the use of glass bottles.
- (iii) increasing the production of plastic bottles
- (iv) re-using their old glass bottles.

(d) The environmentalists think that
- (i) more plastic packaging should be used.
- (ii) plastic is the most convenient form of packaging.
- (iii) too much plastic is wasted.
- (iv) shops should stop using plastic containers.

II. State whether the following statements are true of false.

a. Too many products nowadays are wrapped in unnecessary packaging.
b. The country side is being spoilt by the overproduction of packaging.
c. It is possible to use paper again.
d. The rising price of paper will make it worthwhile for local aurhorities to collect waste-papaer

III. Choose the meaning or explanation which best fits the context in which it is used.

(a) Confined
  (i) used for
  (ii) restricted to
  (iii) needed for
  (iv) suited to

(b) Accounts for
  (i) makes up
  (ii) compensates for
  (iii) is recovered from
  (iv) is kept out of

(c) Messing up
  (i) spoiling
  (ii) altering
  (iii) improving
  (iv) poisoning

(d) Recycled
  (i) reduced
  (ii) reproduced
  (iii) re-used
  (iv) retailed

22. Write a letter to the Editor of a Newspaper about the loudspeaker nuisnance in your locality.

23. Rearrange the following jumbled sentences in the correct order.
  a) Then it is placed in large vats containing water suspensions of frothing agents and thoroughly agitated by jets of air.
  b) The froth process of extracting silver accounts for about 75 per cent of all silver recovered.
  c) The final refining is done using electrolysis.
  d) Silver occurs in ores of several metals.
  e) Firstly the ore is ground to a powder.
  f) Thirdly depending on the agent used, either the silver bearing ore or the gangue adhering to the bubbles of the froth is skimmed off and washed.

24. Write a paragraph of 200 words explaining the role of English as an international language.

25. Read the following passage and draw a flow chart.

The earth contains a large number of metals which are useful to man. One of the most important of these is Iron. The iron ore which we find in the earth is not pure. It contains some impurities which we must remove by smelting. The process of smelting consists of heating the ore in a blast furnace with coke and limestone and reducing it to metal. Blasts of hot air enter the furnace from the bottom and provide the oxygen which is necessary for the reduction of the ore. The ore becomes molten, and its oxides combine with the carbon from the coke. The non-metallic constituents of the ore combine with the limestone to form a liquid slag. This floats on top of the molten iron, and passes out of the furnace through a tap. The metal which remains is pig iron. We can melt this down again in another furnace – a cupola – with more coke and limestone, and tap it out into a ladle or directly into moulds. This is cast iron.

26. Read the following passage and make notes on it.

It is, everyone agrees, a difficult task that a child performs when he learns to speak, and the fact that he does so in so short a period of time challenges explanation.

Language learning begins with listening. Individual children vary greatly in the amount of listening they do before they start speaking and late starters are often long listeners. Most children will 'obey' spoken instructions some time before they can speak, though the word obey is hardly accurate as a description of the eager and delighted cooperation usually shown by the child. Before they can speak, many children will also ask questions by gesture and by making questioning noises.

Any attempt to trace the development from the noises babies make to their first spoken words leads to considerable difficulties. It is agreed that they enjoy making noises and that during the first few months one or two noises sort themselves out as particularly indicative of delight, distress, sociability and so on. But since these cannot be said to show the baby's intention to communicate, they can hardly be regarded as early forms of language. It is agreed, too, that from about three months they play with sounds for enjoyment and that by six months they are able to add new sounds to their repertoire. This self-imitation leads on to deliberate imitation of sounds made or words spoken to them by other people. The problem then arises as to the point at which one can say that these imitations can be considered as speech.

It is a problem we need not get our teeth into. The meaning of a word depends on what a particular person means by it in a particular situation; and it is clear that, what a child means by a word will change as he gains more experience of the world. Thus the use, at say seven months, of 'mama' as a greeting for his mother cannot be dismissed as a meaningless sounds simply because he also uses it at other times for his father, his dog, or anything else he likes.

27. Read the following advertisement published in 'The Hindu' dated 2.7.2004 and write a letter of application.

NET TASKING PRIVATE LTD. (SINGAPORE)

Required IT professionals with Engineering degree in IT or related discipline.

Minimum 3 years experience in software development. Skilled in C++, Java, Python. Please apply with confidence to The HR Manager, Net Tasking Private Ltd. 321, TT Road, Singapore 199876.

28. Discuss the wisdom of investing in gold as an economic proposition in a paragraph of about 200 words.

B.E/B.TECH. DEGREE EXAMINATIONS–JANUARY 2008
FIRST SEMESTER

Time : Three Hours Maximum : 100 marks

SECTION I (20 2=40 marks)

Answer ALL Questions

1. Make antonyms of the following words by adding suitable prefixes:
   (a) rational (b) intelligible (c) toxic (d) pious
2. Match the words in column A with their meanings in column B:

Coulum A	Column B
(a) Feasibility	exhaust
(b) Option	productive
(c) Deplete	choice
(d) Constructive	possibility

3. Frame sentences using the given phrases:
   (a) switch over (b) gone down
4. Fill in the blanks with suitable prepositions:
   Students _____ engineering are provided _____ opportunities _____ get practically trained _____ industries/workshops while doing their course.
5. Define the following terms:
   (a) Capacitor (b) Radar
6. Fill in the blanks by using correct form of the word that agrees with the subject:
   (a) Everyone of the labourers _____ (is/are) given a reward.
   (b) Neither of the combatants _____ (was/were) able to break the record.
7. Fill in the blanks with appropriate form of the verbs:
   Once upon a time, a little orphan boy _____ (live) with his relatives who _____ (treat) him harshly. _____ (Fright) that he _____ (punish) severely he _____ (escape).
8. (a) Transfer the following simple sentence into a compound sentence:
   The teacher appreciated the student for her brilliance.
   (b) Change the following compound sentence into a complex sentence:
   The students have a test and so they are studying.
9. Fill in the blanks with suitable articles:
   Just imagine _____ biology teacher explaining _____ respiratory system or just _____ body part like _____ larynx, to the class.
10. Give the American English equivalents of the following British English words:
    (a) lift (b) aerial.

11. Give the American spelling for the following words:
    (a) analyse (b) calibre
12. Change the following into impersonal passive statements:
    (a) They treat water chemically
    (b) You cannot change the past.
13. Complete the following sentences suitably
    (a) If atmospheric pollution becomes worse, _____.
    (b) If you had approached him, _____.
14. Fill in the blanks with comparative forms of the Adjectives given in brackets:
    (a) The weather this year is _____ (bad) than last year.
    (b) This movie is _____ (dreadful) than the previous one.
15. Rewrite as directed:
    (a) Listening skill is as important as speaking (into Comparative Degree)
    (b) No other acid is as powerful as aqua regia (into Superlative Degree)
16. Expand the following compound nouns:
    (a) concrete structure (b) friction losses
17. Analyse the sentences pattern int the following sentences:
    (a) I met him in Madras last week.
    (b) They made him the Chief Secretary.
18. Frame sentences for the following patterns:
    (a) S + V + C
    (b) S + V + IO + DO
19. Edit the following passage:
    the english language came to england with the germanic tribes who overran england in the fifth century old english borrowed many words from scandinavian language.
20. Describe the process of preparing lime tea.

SECTION II (5 12 = 60 marks)

Answer any FIVE Questions.

21. Read the passage given below and answer the questions that follow:

    Ozone, a molecule made up of three atoms of oxygen, comprises a layer of the atmosphere that absorbs harmful ultraviolet **radiation** from the sun. Chlorine atoms, mainly from man-made chlorofluorocarbons or CFCs, break apart ozone molecules.

    Chlorine compounds used in human activities such as electronics manufacturing and refrigeration are a primary cause of the ozone hole. A large area of intense ozone **depletion** occurs annually over Antarctica during late August through early October. The hole typically breaks up as ozone levels increase in late November.

    The atmospheric Ozone over Antarctica **declined** to record low levels this year due to the combination of an unusually cold winter and the continued presence of man-made chlorine chemicals reported by US scientists. The surface area covered by the so-called, 'ozone hole' in 1993 over 23 million square kilo metres or about twice the size of the Antarctica land mass, was nearly as large as the record 1992 ozone hole.

INSTRUMENT, a Russian satellite orbiting the earth, measured the concentration of ozone over a region near the South Pole, at less than 100 dobson units. This measurement made at the centre of the ozone was confirmed by balloon and ground based instruments.

A Dobson unit is a measure for the physical thickness of the ozone layer. The balloon born measurements also indicated that the Antarctica ozone layer was totally destroyed between the **altitudes** of 13.5 and 19 kilo metres, creating an ozone void of 5.5 kilo metre thickness.

Deep ozone holes will continue to form annually into the next century. Herman, an American scientist, said, "this situation will persist until the stratospheric chlorine levels decrease".

The ozone layer is expected to heal itself and become thicker as a result of CFC cutbacks, mandated by an international treaty called the Montreal Protocol.

(a) State whether the following statements are True or False:
- (i) Ozone is helpful in the process of absorbing certain radiation creating bad effect.
- (ii) Ozone depletion never takes place in the universe.
- (iii) The 1993 ozone hole is considered to be the largest as per the world record.
- (iv) Dobson units are used for measuring the effects of danger of ozone.

(b) Read the passage carefully and then choose the responses which best reflect the meaning of the text:
- (i) Ozone layer is found
  - (1) Near the north pole
  - (2) Near the south pole
  - (3) As a sheet of the atmosphere
  - (4) At both south pole and north pole
- (ii) The ozone molecules break apart due to
  - (1) the ultra violet radiation
  - (2) the heat of the sun
  - (3) the planetary movements
  - (4) the chemicals made by man
- (iii) Ozone depletion occurs annually
  - (1) in many places in the world
  - (2) in the coastal areas
  - (3) only in certain places
  - (4) near forest areas
- (iv) As per the latest record pertaining to the ozone layer this year
  - (1) the level are high
  - (2) the levels are low
  - (3) the levels have functions
  - (4) the levels are intermediary

(c) Choose the meaning which best fits the following words they are used in the text.
- (i) radiation
  - (1) gathering
  - (2) spreading out
  - (3) accumulating
  - (4) penetrating

(ii) depletion
(1) production (2) removal
(3) moisturisation (4) reduction

(iii) decline
(1) becoming weaker (2) becoming thicker
(3) becoming stronger (4) becoming rough

(iv) altitude
(1) length (2) breadth
(3) height (4) circumference

22. Write a letter to the Editor of a newspaper expressing your concern about the increase in the number of road accidents.

23. Rearrange the following jumbled sentences in the correct order:

(a) A quick reading will give a basic idea of the passage.

(b) If the correct answer is not immediately apparent, check if the options fit in with the meaning and the structure of both the sentence and the passage.

(c) Finally use discretion and judgement to choose the correct option from the remaining choices.

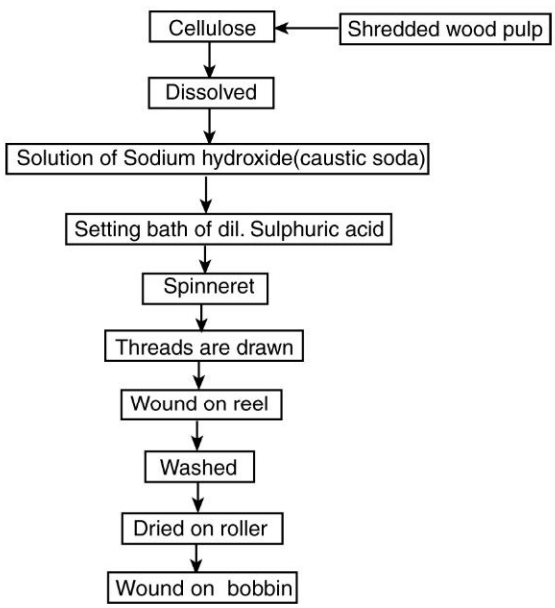
(d) Answering cloze tests requires analytical skills.

(e) The second reading should be accompanied with a reading of the options given after the passage.

(f) And then eliminate choices that do not clearly fit in the sentences.

24. Write a paragraph of 200 words describing the uses of internet.

25. Transcode the following flow chart into a passage of 150 words:



26. Read the following passage and makes notes on it :

Most robots of today consist of little more than a mechanical arm and a computer memory. The memory allows the arm to repeat a simple motion like moving a part from one work-bench to another. Because its memory can store a collection of such motion, the robot can switch quickly from one simple task to another. It will not complain of boredom, balk at job demarcation lines, take a tea-break or go sick. This faithful servants is also a stupid one. It has no problem-solving 'intelligence' or 'senses' that would alert it, if the part that was meant to pick was upside down — or not there at all. A robot is less capable than a man groping in the dark. Atleast a man can tell by touch, if he merely bumped into something.

Although robots are gradually improving, today's growth in robotics is largely because industry has learnt how to accommodate these mindless, mechanical workers. The automobile industry, which employs some 60 percent of the world's 20,000 robots, has been leading the way to improving its applications.

This is no surprise, as assembly-line production is repeated with simple, repetitive jobs that robots can do so well. Robots are being put to work in loading and unloading conveyors, welding car bodies together and spray-painting the finished product. Parts of a car have long been carried to human workers on conveyor belts. It takes only a bit of careful engineering to position each time. Having accommodated to their senselessness, robots can boost productivity, with their untiring speed, and boost quality with their mindless ability to do the same job, in exactly the same way every time.

Even smaller manufactures are finding places for robots in their factories. Some are simply using robots to perform tasks like loading and unloading moulds and presses, which are similar to the jobs, robots do in assembly-lines.

27. Write a letter to the Manager, ASEAN solutions, Ahmedabad, seeking permission to undergo in-plant training for a week. Assume suitable names and addresses. State yours reasons for choosing their company.

28. Describe in two paragraphs the advantages and disadvantages of nuclear power as an alternative source of energy (200 words).

ANNEXURE

PREPOSITIONAL PHRASES

Some of the prepositional phrases are:

AT: at first, at least, at most, at times, at any rate, at last, at the latest, at once, at short notice, at an advantage, at a disadvantage, at risk, at a profit / loss

BY: by accident, by far, by all means, by heart, by chance, by and by, by the way, by the time, by no means, by name, by sight, by now, by then

FOR: for now, for instance, for example, for sale, for a while, for the moment, for ages, for a change, for better or worse

FROM: from now on, from then on, from bad to worse, from my point of view, from what I understand, from personal experience

UNDER: under age, under control, under the impression, under guarantee, under the influence of, under obligation, under no obligation, under suspicion, under his thumb, under discussion, under consideration

WITHOUT: without fail, without notice, without exception, without someone's consent, without success, without warning, etc.

Examples

1. In case of bad weather, the trip will be postponed to next week.
2. On behalf of my fellow employees, I would like to thank the management for all they have done to improve our situation.
3. We finally solved our problem by means of a new device, created by our research and development department.
4. As for me, I will be happy to dedicate a few extra hours to the cause.
5. You will have to remember that, apart from John, no one wants to work on this problem.
6. How can they be going out?! Jane has nothing in common with Peter.
7. According to John, they won't finish the project until the end of next week.
8. I'm all in favour of helping the poor when in need.
9. We will have to postpone our trip because of bad weather.
10. Because of the lack of interest in our product, we are going to stop production of the 'whamo ring'.

11. Due to the large number of requests we have received, we are going to extend the sale to the end of the month.
12. In addition to our friendly staff, you'll find our hotel provides everything you could ever desire.
13. There is a mysterious car in front of the gate.
14. She was a fearless woman who acted without regard for her health.
15. With regard to your proposal Tom, I'm afraid we won't be able to approve your project.
16. Learning English is sometimes difficult. However, you should remember that communication is by far the most important thing.
17. I'm afraid I've charged you too much by mistake. Sorry about that!
18. You are going to have to work overtime regardless of your responsibilities at home.
19. Please don't be angry with me. I didn't break the toy on purpose.
20. The local police are talking to Tom. I think he is under suspension for the crime.
21. I'll make sure your instructions are followed at once..
22. Jack is clearly at a disadvantage, when it comes to speaking a foreign language.
23. I'm sure he didn't mean to break the window. It must have happened by accident.
24. Remember you are under no obligation to buy the product. Take it home and try it out for a week. If you don't like it, just return it to the store.
25. Without fail, John comes to every lesson right on time.
26. It is by no means an easy test. Make sure to study hard!
27. I guess we'll just have to wait for a response for now.
28. At first he considered looking for a new job, but then he decided to continue a few more months in his current position.
29. I'm afraid we can't do anything about that at the moment..
30. I'm afraid you can't enter this bar because you are under age.
31. They learned all their lines for the play by heart
32. We're going to have to concentrate on improving customer service, from my point of view.
33. Don't worry about the stereo. It's still under guarantee, so we can get it fixed.
34. From now on, I want you to focus on improving your grades at school. Otherwise, we'll have to cancel this summer's plans.
35. There are many things you can do to get in shape. For instance, you can go to the local gym.

36. By the time he finishes the projections, we'll have done the necessary research to complete the project.
37. She's very pleased that they were able to sell their house at a profit.
38. The situation is horrible here. Things are going from bad to worse.
39. He's been living in Italy for ages.
40. You can trust John to have everything under control.
41. Those customers are by far the most demanding we've ever had.
42. Unfortunately, I might have to leave for Boston at short notice.
43. For better or worse, you're just going to have to try and get along with your new boss.
44. It'll cost $500 at the most.
45. I think we'll go to the mountains this year for a change.
46. They learned all their lines for the play by heart.
47. They should arrive by six o'clock at the latest.
48. You've arrived at last!
49. Life is funny that way. Things are going badly and then ,without warning , good things start happening and you're on your way to better times.
50. Our teacher knows all the students by name, even though there are more than 40 of us.
51. At any rate, he finally decided to go ahead with the new marketing project.
52. It seems that our investment is at risk, so I'll need to fly to our headquarters to discuss the situation.
53. Janet assured them that she would have finished the report by then.
54. All I can say is that, from personal experience, you're going to have to spend more time practising your listing comprehension skills.
55. I'm afraid, I was under the impression that you enjoyed working here. I must have been mistaken.
56. By the way, did you know that Mark and Susan are getting married next week?
57. I met John at the market this afternoon by chance.
58. He's going to stay in Memphis and hunt a job for a while.

RELATIVE PRONOUNS

The Pronouns *Who, Whom, Which, That*, which join two sentences and refer to Nouns which have gone before are called *Relative Pronouns*

1. *Who* is used for persons only. It may refer to a Singular or a Plural Noun.

The man who is honest is trusted.

Blessed is he who has found his work.

The women who were there were frightened.

Trust no man who does not love his country.

I saw a beggar who was deaf and dumb.

Here is a boy who is good at sports.

They always preach who never practise.

I met a man who has just returned from France.

Those who live in glass houses should not throw stones at others.

The students who work hard always pass.

The boys who were lazy were punished.

2. *Which* is used for things without life and for animals. It may refer to a Singular or a Plural Noun.

The moment, which is lost is lost for ever.

The book, which has pictures in it is mine.

These are the pens, which we lost yesterday.

The books which help most, are those which have pictures in them.

Those are the dogs, which bit the children.

Mangoes, which are over-ripe, should be thrown away.

The horse, which won the race, is called *Mother's Boy.*

The elephant, which is an animal that never forgets, lives more than a hundred years.

Our wireless set, which has been broken for weeks, is now mended.

Parliament, which has just started a new session, is going to discuss the new bill today.

3. *That* is used for persons, animals and things.

I have lost the watch, that you gave me.

Uneasy lies the head, that wears the crown.

I know the house, that he lives in.

He that is not with me, is against me.

The man that you want, has just left.

The magazine that you lent me, is very interesting.

The fish that I ate yesterday, was not good.

The flowers that I cut this morning, are still fresh.

The dress that you are wearing, is lovely.

The letter that we received today, had no stamp on it.

The doctor that visited me, is famous.

All that I said, had no effect on him.

He was the most eloquent speaker, that I ever heard.

Milton was one of the greatest poets, that have ever lived.

4. The Relative Pronoun *that* is used in preference to *who* or *which.*

(i) After Adjectives in the Superlative Degree; as,

The wisest man that ever lived made mistakes.

This is the best that we can do.

(ii) After the words *all, same, any, none, nothing,* (the) *only*; as,

All that glitters is not gold.

It is only donkeys that bray.

He is the same man that he has been.

(iii) After the Interrogative Pronoun *who, what;* as,

What is it that troubles you so much?

Who am I that should object?

5. *What* refers to *things* only.

What is done cannot be undone.

What is one man's meat, is another man's poison.

This is what I want.

What cannot be cured must be endured.

I mean what I say.

What I have written, I have written.

He found what he was looking for.

Take down what I dictate.

6. The word *as* is used as a Relative Pronoun after *such* and sometimes after *the same,* as

My position is the same as yours.

This is not such a good book as I expected.

He is such a man as I honour.

His answer was such as I expected him to give.

I have such friends as will stick to me through thick and thin.

I want to sell such books as I do not require.

7. The word *but* after a negative, often has the force of a Relative Pronoun, as ,

There is none but will agree with me.

There is no man but loves (= who does not love) his country.

(Courtesy: Wren and Martin: High School English Grammar and Composition)

Q. Fill in the blanks with suitable relative pronouns:

1. From a medium that was largely used by computer venders, web advertising today involves almost every product and brand.
2. It was Captain Cook who sailed in the unknown South Seas in the18th Century and claimed Australia and the New Zealand for the British Crown.
3. India is a land where people, at every level, participate to ensure regenerative management of land.
4. The novel which has been written by Charles Dickens, is about social evils.
5. He who is honest in his dealings with others, will always be rewarded.
6. This is an industrial society which has combined the wisdom of nature with the genius of human innovation and invention.
7. I paid the man who did the work.
8. The farm that he bought has doubled in value.

REFERENCE WORDS

Words like *this, that, it, its, these, those, etc*. are called reference words.

Q. Fill in the blanks with suitable reference words.

1. A newspaper's responsibility does not stop, when it throws its columns open to art features. Apart from its routine coverage of art activities, there are many ways in which it can promote art effectively.

2. In 1939, Germany started World War II; she was confident that she could conquer and control all of Europe. She spread death and destruction over much of the continent. But, after several years of war, Germany herself began to suffer severe losses.

3. Today India Mark II is praised by water experts all over the world. It can pump water from as deep as 80-90 metres. It can also be motorised or run on windmills.

4. The present day computer viruses are different from their ancestors. Earlier, these programmes were spread by users who shared programmes and data via floppies. These viruses either hid in the boot sector of floppy disk or in programme files, infecting other files when progrmmes were launched. But today, they spread at a dizzying speed by way of file transfers and email through the internet.

5. Appropriate technology is a technology that is developed to cater to the basic needs of economically poor people. Also, it is concerned with only the small scale technology. Appropriate technology lies somewhere between a traditional and a modern technology. It is particularly easy to operate and can be maintained by less skilled persons. A special feature of this technology is that it can be applied to a variety of rural needs.

6. Rajesh worked as a farmer in a village near Salem till June 1990. In July 1990, he changed his profession. After the change, he migrated to Chennai and through hard work he become rich. At present, he is owner of two factories in the city.

7. Srinivasa Ramanujan was a great mathematical genius. He accepted a clerical position in the Madras Port Trust Office. While he was working as a clerk, he wrote to G.H Hardy of Cambridge University, a letter, that was to change his life.

8. Sir Benjamin Baker, a British Civil Engineer, was an expert on bridges. Before the age of twenty, he learnt all about steel and iron. A practical man, he never left anything to chance. He insisted on carrying out exact test on every piece of steel or iron. He wrote a book about cantilever bridges. He won a reputation for brilliance in the engineering profession. He helped in building new underground railways in London. He built the famous Aaswan dam in Egypt.

CORRECTION OF SENTENCES

Q. Correct the following sentences:

1. Somebody in the company might break their promise to the committee.
2. Each of the politicians explained their view.
3. If anybody asks for me, tell them I'll return at 2 O' clock.
4. Everyone likes to have their way.
5. Each must do their best.
6. Everybody have their own ideas.
7. Each of the boys got their prize.
8. Each boy took their turn.
9. Every General and Admiral did their duty well.
10. Every man and every boy cast their vote for you.
11. Hari or Govind may offer their services.
12. Either Priya or Sita will bring their guitar.
13. Neither Ram nor Shyam took their food today.
14. The boy which was lazy was punished.
15. Every soldier and every sailor was in their place.
16. Rama or Hari must lend their hand.
17. Either the manager or his assistants failed in his duty.
18. Such a man as they should be honoured.
19. I know the woman whom child was hurt.
20. John, which is my cousin, is a diligent boy.
21. Napoleon, who the French honour, died at St. Helena.
22. Coal, who is a very useful mineral, is found in Bengal.
23. The horse has hurt himself.
24. John is the man who we are going to recommend for the job.
25. The officials object to them wearing long dresses for the inaugural dance at the country club.
26. Each of the students in the accounting class has to type their own research paper this semester.
27. Some of us have to study their lessons more carefully if we expect to pass their examination.

28. Mr.Peter used to think of hisself as the only president of the company.
29. The president refuses to accept either of the four new proposals made by the contractors.
30. I certainly appreciate him telling us about the delay in delivering the materials because we had planned to begin work tomorrow.
31. Writers and media personnel sell theirselves best by the impression given in their verbal expression.
32. The test administrator ordered we not to open our books until he told us to do so.
33. Those of you who signed up for Dr. Damiel's anthropology class should get their books as soon as possible.
34. Anybody who has lost their ticket should report to the desk.
35. One should always do your homework.
36. You should always look both ways before we cross the street.
37. Every man have their own work to do.
38. Everybody thinks they have the right to strike.
39. Neither you nor Afzal have been selected.
40. They were counting on me helping them.
41. I am going to a picnic.
42. I wish I have the job.
43. Are you born in Chennai?
44. That will effect your health.
45. I have been here for the last one and a half month.
46. Please return back the books to the library.
47. Sorry for the delay in replying you.
48. My uncle has left for Chennai yesterday.
49. She is leaving for London today night.
50. Lakshmi is taller than any girl in the class.
51. I can be able to drive a car.
52. He entered into the room .
53. I and he are friends.
54. I and you are neighbours.
55. I, he and you are in the same class.

56. She is suffering with fever.
57. I look forward to meet you.
58. Let you and I go together.
59. His hairs are brown.
60. She bought three dozens oranges.
61. If you will work hard, you will pass.
62. These news are good.
63. If I am a bird I would fly.
64. He bought new furnitures.
65. Her father gave her good advices.
66. He was born in Delhi in India.
67. According to my opinion, it is correct.
68. His grandfather is died.
69. Fill up the application form.
70. The cost of all these things have risen.
71. I work very hardly.
72. They are using new machineries.
73. Before the doctor arrived, the patient died.
74. Fifty kilometres are a long distance to walk.
75. I bought some stationary yesterday.
76. Be careful not to loose your money.
77. The dog jumped on the cat.
78. Will I help you?
79. Shall you help me?
80. If you had worked hard, you would pass the examination.
81. He ordered to the servant to get out.
82. I went to a hotel and ordered for a cup of coffee.
83. She is interested to watch T.V.
84. I enjoy to sing songs.
85. You can't avoid to make mistakes.

86. The porter carried all his luggages.
87. He asked me what I am doing.
88. The rain prevented me to go.
89. I am used to get up early.
90. I complimented him for his success.
91. The road is on repair and closed for traffic.
92. He wrote the answer with ink.
93. It is 10 O' clock in my watch.
94. All the players must come with uniform.
95. I want permission for half hour.
96. The gold is a precious metal.
97. We must conform with the rules.
98. She was dressed with black.
99. I am accustomed with hot water.
100. He is afraid from the dog.

Answers:

1. Somebody in the company might break his promise to the committee
2. Each of the politicians explained his view.
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