

(Held on 11-03-2011)

## PAPER - 1 (OBJECTIVE TYPE)

### REASONING ABILITY

**Directions (1-5) :** In each of the following questions, a statement or two are followed by two conclusions. Give answer (1) if conclusion I follows; (2) if conclusion II follows; (3) if both I and II follow; and (4) if neither I nor II follows.

**1. Statement :** In deserts, camels are indispensable for people to travel from one place to another.

**Conclusions :**

- I. Camels are the only cheapest mode of transport available in deserts.
- II. There are plenty of camels in deserts.

**2. Statement :** Smoking is one of those human weakness which tends to test the willpower of the smoker to the edge.

**Conclusions :**

- I. It is very difficult for the smokers to give up smoking even if they want to do so.
- II. Human beings have other weaknesses as well.

**3. Statement :** Old order changes the yielding place to new.

**Conclusions :**

- I. Change is the law of nature.
- II. Discard *old ideas because they are old.*

**4. Statement :**

- I. The TV programmes telecast specially for women, are packed with a variety of recipes and household hints.
- II. A major portion of magazines for women also contains the items mentioned above.

**Conclusions :**

- I. Women are perhaps not interested in other things.
- II. An average women's primary interest lies in home and specially in the kitchen.

**5. Statement :** I know nothing except the fact of my ignorance.

**Conclusions :** I. The writer's knowledge is very poor.

- II. The world of knowledge is too vast to be explored by a single person.

**Directions (6-10) :** In each of the following questions, a given statement is followed by few assumptions (An assumption is something assumed or taken for granted). Read the statement carefully and decide which of the assumptions are implicit in the statement.

**6. Statement :** "If he proves a single charge against me, I vow that I will quit politics forever." A politician in a speech.

**Assumptions :**

- I. The charges levelled against the politician are false.
- II. The charges levelled against the politician are beyond proof even if true.
- III. The politician is fed of politics.
  - (1) Only I is implicit
  - (2) Only II is implicit
  - (3) Only III is implicit
  - (4) I and III are implicit

**7. Statement :** "To err is human. Every man makes mistakes. But to learn from those mistakes is what makes great men. And this is way there are few of great men around us."—A philosopher in his speech.

**Assumptions :**

- I. Mistakes do not make significant issues.
- II. There are very few persons who learn from mistakes.
- III. If a man learns from mistakes, he is a great man.
  - (1) Only I is implicit
  - (2) Only II is implicit
  - (3) Only III is implicit
  - (4) I and II are implicit.

**8. Statement :** "You cannot solve such questions without consulting a diagram. Difficult questions need diagrams for solving." — A teacher tells his students.

**Assumptions :**

- I. The students are not intelligent.
- II. The problem cannot be solved.
- III. Such questions are difficult.
  - (1) I and II are implicit
  - (2) Only II is implicit
  - (3) Only III is implicit
  - (4) None is implicit

**9. Statement :** "Why should we not protest? When we ask for drinking water they are giving us Pepsi and Coca-Cola"— A politician in an interview.

**Assumptions :**

- I. Only drinking water is good for people's health.
- II. Providing people drinking water is more important than providing Pepsi and Coca-Cola.
- III. Pepsi and Coca-Cola do not contain healthy drinking water.
  - (1) Only I is implicit
  - (2) Only II is implicit
  - (3) I and II are implicit
  - (4) Either II or III is implicit

**10. Statement :** "Hungry stomachs do not understand high values and economic ethics. They will vote a man who gives them rice"— A political analyst on why a particular party won the election.

**Assumptions :**

- I. A lot of people are hungry.
- II. Rice was not available previously.
- III. Rice was available only in limited quantity.
  - (1) Only I is implicit
  - (2) I and II are implicit
  - (3) I and III are implicit
  - (4) All are implicit

**Directions (11-15) :** Read the following information to answer the given questions.

An institution announced that its six different programmes : Talk on Physical Development and Health; Talk on Spiritualism and Moral Development; Talk on Yoga and Capacity to Fight the Diseases; Talk on Mental Balance and Well Being; Talk on Environment; and Devotional Songs will be held in the first week of March, 2007 from Monday to Sunday. Only one on each day in accordance with the following :

- (i) Talk on Mental Balance and Well Being would be held immediately after talk on Environment.
- (ii) Talk on Yoga and Capacity to Fight Diseases would be held on Wednesday and would not be followed by Talk on Devotional Songs.

(iii) Talk on Spritualism and Moral Development would be held on Friday and there would be a gap of two days between Talks on Physical Development and Health, and Devotional Songs.

(iv) One day there would be no talk (Saturday is not that day), just before that day Devotional Songs would be held.

11. How many talks would be held between Talk on Mental Balance and Well Being, and Talk on Yoga and Capacity to Fight Diseases?

- (1) Five (2) Two  
(3) Three (4) Four

12. On which day no programme would be held ?

- (1) Friday (2) Tuesday  
(3) Saturday (4) Sunday

13. What would be organised on First day (Monday) ?

- (1) Talk on Environment  
(2) Talk on Yoga and Capacity to Fight Diseases  
(3) Talk on Devotional Songs  
(4) Talk on Physical Development and Health.

14. What would be organised on last day (Sunday) ?

- (1) Talk on Mental Balance and Well Being  
(2) Talk on Spritualism and Moral Development  
(3) Talk on Physical Development and Health  
(4) Talk on Devotional Songs

15. On which day talk on Physical Development and Health would be organised ?

- (1) Wednesday (2) Tuesday  
(3) Thursday (4) Saturday

**Directions (16-20) :** In each of the following series two terms have been put within brackets. Mark in your answer sheet.

- (1) if both the bracketed terms are right;  
(2) if the first bracketed term is right and second is wrong;  
(3) if the first bracketed term is wrong and the second is right; and  
(4) if both the bracketed terms are wrong.

16. 0, 3, 30, (65), 105, (170), 252

17. 6, (13), 22, (33), 46, 61, 78, 97

18. 2, (5), 14, 23, (34), 47, 62

19. 0, 3, 8, (28), 40, (65), 128

20. 1, (3), 8, 16, 28, 46, (68)

**Directions (21-25) :** Each of the following questions contains six or seven statements followed by four options each of which is a combination of three statements. Choose the option in which the three statements are logically related.

21.

- A. All happy persons are sincere persons.  
B. Some children are happy persons.  
C. All sincere persons are happy.  
D. No child is happy.  
E. Some happy persons are not children.  
F. Some children are sincere person.  
(1) ABD (2) ABF  
(3) BCE (4) BEF

22.

- A. All geniuses can solve the problem.  
B. All students can solve problems.  
C. All students are geniuses.  
D. All students are mathematicians.  
E. Some mathematicians are geniuses.  
F. All those who can solve this problem are mathematicians.  
G. Some geniuses are not mathematicians.  
(1) ABC (2) CEG  
(3) DEF (4) DFG

23.

- A. All flowers are beautiful.  
B. All beautiful things need air.  
C. All sweet smelling things are beautiful.  
D. All flowers are sweet smelling.  
E. All flowers are fragrant.  
F. All flowers need air.  
(1) ABF (2) CDE  
(3) ACD (4) BCF

24.

- A. Some accidents are not expected incidents.  
B. Some accidents are not fatal.  
C. Some fatal ones are not expected incidents.  
D. No accident is an expected incident.  
E. Some illnesses which turn out to be fatal are not due to accidents.  
F. All accidents are fatal.  
(1) DBC (2) CAB  
(3) DFC (4) ACD

25.

- A. All mothers are affectionate.  
B. Some girls are affectionate.  
C. Some who are affectionate are not mothers.  
D. Some daughters are affectionate.  
E. Some girls are daughters.  
F. Some daughters are mothers.  
G. All girls are mothers.  
(1) AGC (2) FDA  
(3) CED (4) GEF

**Directions (26-33) :** Read the following information carefully and answer the questions that follow. Following are the conditions for promotion from Junior Officer's Cadre to Senior Officer's Cadre in an organisation :

The candidate must-

- A. Have completed atleast 5 years in the organisation.  
B. Have secured 65% marks in the written test for promotion.  
C. Have secured 60% marks in the Group Discussion.  
D. Have secured 70% marks in the interview.  
E. Have good record of his work performance.  
F. Have good communication skill and gets along well with his colleagues.  
G. Not be more than 40 years and less than 30 years as on 11.03.2007  
H. Have good academic record, with an average of atleast 65% marks. However, in the case of a candidate who -  
I. Satisfies all other conditions except (D) above but has secured 75% marks in the written test and 65% marks in the Group Discussion, the case is to be referred to the General Manager (Personnel)-GM (P) for the decision.  
J. Satisfies all other criteria except (H) above but has secured an average of more than 60% marks the case is to be referred to the Managing Director (MD) of the organisation.  
Now read the information provided in the case of each candidate in each of the questions given below and decide on the basis of the information provided and based on the above conditions, which of the courses of action you would suggest. These cases are given as on 11.3.2007 (Remember you are not to assume anything which is not provided in the question).

26. 34 years old Ramesh has secured 76% marks in the written test for promotion, 66% marks in Group Discussion and 67% marks in the interview. He has good academic record with an average of 68% marks, good communication skill and gets along well with his colleagues. His work performance is good and he has completed 6 years in the organisation.

- (1) Promote (2) Refer to MD  
(3) Refer to GM (P)  
(4) Data inadequate

27. 34 years old Madhu has secured 60% marks in the written test for promotion, 72% marks in interview and 69% marks in Group Discussion. She has good communication skill and gets along well with her colleagues. Her record of work performance is good and she has completed 6½ years in the organisation.

- (1) Refer to MD  
(2) Do not promote  
(3) Promote  
(4) Data inadequate

28. 31 years old Jairam secured 67% marks in written test for promotion, 72% marks in Interview and 62% marks in Group Discussion. He has good academic record with an average of 67% marks and good communication skill. He has completed 9 years in the organisation. He gets easily annoyed and irritated with his colleagues and his record of work performance since the last two years is just average.

- (1) Promote  
(2) Refer to GM (P)  
(3) Refer to MD  
(4) Do not promote

29. 33 years old Ravi has secured 63% marks in Group Discussion, 71% marks in Interview and 66% marks in written test for promotion. She has good academic record with an average of 68% marks and has good communication skill. She gets along well with her colleagues and has good record of her work performance. She has completed 6 years in the organisation.

- (1) Refer to GM (P)  
(2) Do not Promote  
(3) Promote  
(4) Data inadequate

30. Dinesh has secured 70% marks in written test for promotion, 69% marks in Group Discussion and 72% marks in the interview. He has a good academic record with an average of 67% marks. He has good record of work performance and gets along well with his colleagues. He has good communication skill and has completed 7 years in the organisation.

- (1) Do not promote  
(2) Refer to GM (P)  
(3) Refer to MD  
(4) Data inadequate

31. 38 years old Mahmud has secured 65% marks in the written test for promotion, 73% marks in interview and 62% marks in Group Discussion. He has good record of his work performance, good communication skills and gets along well with his colleagues. He has good academic record with an average of 61% marks and has completed 7 years in the organisation.

- (1) Refer to GM (P)  
(2) Refer to MD  
(3) Promote  
(4) Do not promote

32. 32 years old Jayant has a good academic record with an average of 66% marks. He has secured 67% marks in Group Discussion, 75% marks in interview and 60% marks in written test for promotion. He has good communication skill and gets along well with his colleagues. He has good record of his work performance and has completed 7 years in the organisation.

- (1) Do not promote  
(2) Refer to MD  
(3) Refer to GM (P)  
(4) Data inadequate

33. 39 years old Suresh has secured 66% marks in written promotion test and has a good academic record with an average of 62% marks. He has secured 65% marks in Group Discussion and 72% marks in interview. He has good record of his work performance, gets well along with his colleagues and has good communication skill. He has completed 6 years in the organisation.

- (1) Do not promote

- (2) Refer to MD  
(3) Refer to GM (P)  
(4) Promote

34. Complete the following series.  
a a c - b b a - c c - b a a - c b -  
(1) c a b c b (2) b a c a b  
(3) a a b c b (4) c c b c b

35. Correct the following equation by interchanging two signs.

$$16 + 4 \div 2 - 21 \times 7 = 21$$

- (1) +, - (2) +, ×  
(3) -, ÷ (4) ×, ÷

**Directions (36-40) :** In the questions that follow different symbols have been used with different meanings as follows :

$P \psi Q$  means P is equal to Q.

$P \eta Q$  means P is either smaller than or equal to Q.

$P \delta Q$  means P is greater than Q

$p \gamma Q$  means P is either greater than or equal to Q.

$P \$ Q$  means P is smaller than Q.

For each question you have to assume, the given statements to be true and then to decide which of the two given conclusions is/ are definitely true. Give answer

- (1) if only conclusion I is true;  
(2) if only conclusion II is true;  
(3) if either conclusion I or II is true; and  
(4) if neither conclusion I nor II is true.

36. **Statements :**

$A \$ B, D \eta E, C \psi D, C \gamma B$

**Conclusions :** I.  $E \delta B$   
II.  $B \psi E$

37. **Statements :**

$R \gamma A, U \delta L, A \psi H, H \gamma U$

**Conclusions :** I.  $H \psi L$   
II.  $L \$ H$

38. **Statements :**

$W \delta U, Y \psi X, Z \$ Y, X \gamma W$

**Conclusions :** I.  $Z \psi W$   
II.  $X \delta Z$

39. **Statements :**

$W \$ N, S \psi Q, R \gamma N, S \$ R$

**Conclusions :** I.  $W \$ R$   
II.  $N \psi Q$

40. **Statements :**

$M \$ L, O \delta P, M \psi N, O \eta N$

**Conclusions :** I.  $M \delta O$   
II.  $M \psi O$

## ENGLISH · LANGUAGE

**Directions (41-45) :** Each sentence has four underlined words or phrases. The four underlined parts of the sentence are marked (1), (2), (3) and (4). Identify the one that is not acceptable in standard written English.

41. The relationship between (1)/ small and large business in (2)/ many countries have changed (3)/ considerably due to modern franchising (4).
42. My friend will not only (1)/ receive you at the (2)/ station and also (3)/ have you as a guest in his house (4)
43. Each of the (1)/ mistakes have (2)/ to be corrected before (3)/ printing the article. (4)
44. Which time (1)/ do you have to (2)/ go to (3)/ the dentist tomorrow (4)?
45. The number (1)/ of fatal accidents in which (2)/ people are run down (3)/ and killed have forced (4)/ the police to the more stringent with traffic rules.

**Directions (46-50) :** Each question has a sentence with two blanks. From the alternatives select the pair which best completes the given sentence.

46. The news about the bank ..... threw the financial market into a .....
- (1) safety                      upheaval  
(2) cheating                    confidence  
(3) robbery                      suspicion  
(4) fraud                        turmoil
47. The western society is known for its ..... whereas Indian society is .....
- (1) conservatism    strict  
(2) permissiveness restrictive  
(3) activeness        impassive  
(4) waywardness    submissive
48. If you carry this ..... attitude to the conference, you will ..... any supporters you may have at this moment.
- (1) truculent            alienate  
(2) conciliatory        defer  
(3) uliquitous          impress  
(4) restrictive          attract
49. When I listened to his cogent arguments, all my ..... were ..... and I was forced to agree with his point of view.
- (1) questions            unanswered  
(2) doubts                confirmed

- (3) senses                    stimulated  
(4) doubts                    dispelled

50. A number of journalists and lens men were ..... by the police when they went to cover the ..... drive of the State government.

- (1) attacked                vacuous  
(2) combated                evacuation  
(3) assaulted                eviction  
(4) infringed                demolition

**Directions (51-55) :** In each question, the word given in **bold** is used in four different ways. Choose the option in which the usage of the word is **incorrect or inappropriate**.

### 51. Match

- (1) Fans in India go crazy over a cricket match.  
(2) Do you think this shirt matches three trousers?  
(3) Don't show a match to the bonfire yet.  
(4) This car has no match in the market.

### 52. Rest

- (1) The doctor told him to rest for a few days.  
(2) His mother rests in peace in their family graveyard.  
(3) This car hit the three, rolled over and came to rest in a ditch.  
(4) Why don't you rest for something?

### 53. Introduce

- (1) The host introduced the guests to one another.  
(2) Introducing insulin into the body is a delicate matter.  
(3) The employees welcomed the changes introduced by the new Director.  
(4) You should introduce a few jokes into your next speech.

### 54. Ride

- (1) Nowadays he is riding low in his office.  
(2) I went for a ride last Saturday on my brother's bike.  
(3) Your boss is riding you too hard at the moment.  
(4) I don't think one can take me for a ride easily.

### 55. Press

- (1) The manager is pressed by my qualifications.  
(2) The crowd pressed against the door trying to get into the building.

- (3) The children pressed some flowers in their books.

- (4) I want to press my shirt.

**Directions (56-58) :** In each of the following questions statements 1 and 6 are respectively the first and the last sentences of a paragraph. The statements P, Q, R and S come in between them. Rearrange P, Q, R and S in such a way that they make a coherent paragraph together with statements 1 and 6. Select the correct order from the given choices.

56. 1. The press is often called 'the fourth estate.'

P. With enough freedom it can mould public opinion and express it freely.

Q. It requires freedom so that it may act its part effectively.

R. It plays a very important role in democracy.

S. A censored press cannot perform all these functions effectively.

6. We are happy that the Indian press has enough opportunity to play its role well.

- (1) P Q R S      (2) P R Q S

- (3) Q R S P      (4) R Q P S

57. 1. Planning in India is a difficult problem.

P. So planners cannot decide the size of the plan.

Q. The gap between what people want and what can be done is big.

R. Moreover resources are limited.

S. Plan can be drawn on the basis of actual resources.

6. But without planning no nation can progress.

- (1) Q P R S      (2) P Q R S

- (3) Q R S P      (4) P R Q S

58. 1. It is often said that spiritualism is vanishing from our lives.

P. In the present age and in the age to come God will be the first casualty.

Q. In the present age we have achieved only material progress.

R. Our past ages were characterised by spiritualism.

S. Progress through materialism will assume even greater intensity in the times to come.

6. Materialism without losing the tinges of morality seems to be a better choice.

- (1) P R Q S      (2) Q P S R

- (3) Q S R P      (4) Q P R S

**Directions (59-65) :** In the following passage, some of the words have been left out. Read the passage carefully and fill in the blanks by selecting the most appropriate alternatives. The question number from which a word is to be selected out of the four given as alternatives, is written in each blank space.

If we examine the opportunities for education of girls or women in the less developed countries we usually find a (59) picture. In some countries the ratio (60) boys to girls in secondary schools is (61) then seven to one. In Afghanistan, Turkey and Tunisia (62) sizeable towns have some sort of (63) where boys from a village may (64) while they attend high school (65) there are no such facilities for girls.

59. (1) dismal (2) hazy  
(3) bright (4) dull
60. (1) from (2) of  
(3) in (4) for
61. (1) lesser (2) smaller  
(3) better (4) more
62. (1) no (2) more  
(3) most (4) very
63. (1) school (2) hotel  
(3) office (4) hostel
64. (1) eat (2) remain  
(3) study (4) live
65. (1) moreover (2) and  
(3) however (4) even

**Directions (66-70) :** Read the following passage and answer the questions given below it.

It can be said that one of the most painful circumstances of recent advances in science is that each one makes us know less than we thought we did. Whether the soul survives death was a matter as to which opinions might differ, but that there is a soul was thought to be indubitable. As for the body, the plain man of course considered its existence self-evident, and so did the man of science, but the philosopher was apt to analyse it away after one fashion or another, reducing it usually to ideas in the mind of the man who had the body and anybody else who happened to notice him. The philosopher, however, was not taken seriously, and science remained comfortably materialistic, even in the hands of quite orthodox scientists.

These fine old simplicities are lost today. Physicists assure us that there is no such thing as matter, and psy-

chologists assure us that there is no such thing as mind. This is an unprecedented occurrence. To begin with the latter, some of them attempt to reduce everything that seem to be mental activity to an activity of the body. There are, however, various difficulties in the way of reducing mental activity to physical activity. What we can say, on the basis of physics itself, is that what we have hitherto called our body is really an elaborate scientific construction not corresponding to any physical reality. The modern would be materialist thus finds himself in a curious position, for, while he may with a certain degree of success reduce the activities of the mind to those of the body, he cannot explain away the fact that the body itself is merely a convenient concept invented by the mind. We find ourselves thus going round and round in a circle mind is an emanation of body, and body is an invention of mind. Evidently this cannot be quite right, and we have to look for something that is neither mind nor body, out of which both can spring.

The plain man thinks that material objects must certainly exist, since they are evident to the senses. Whatever else may be doubted, it is certain that anything you can bump into must be real. This is all very well but the physicist comes along and shows that you never bump into anything even when you run your hand along a stone wall, you do not really touch it. When you think you touch a thing, there are certain electrons and protons, forming part of your body, which are attracted and repelled by certain electrons and protons in the thing you think you are touching, but there is no actual contact. The electrons and protons in your body, becoming agitated by nearness to the other electrons and protons are disturbed and transmit a disturbance along your nerves to the brain, the effect in the brain is what is necessary to your sensation of contact, and by suitable experiments, this sensation can be made quite deceptive. The electrons and protons themselves, however, are only crude first approximations a way of collecting into a bundle either trains of waves or the statistical probabilities of various different kinds of events. Thus matter has become altogether too ghostly to be used as an adequate stick with which to beat the mind. Matter in motion, which used

to seem so unquestionable, turns out to be a concept quite inadequate for the needs of physics.

Nevertheless, modern science gives no indication whatever of the existence of the soul or mind as an entity; indeed the reasons for disbelieving in it are very much of the same kind as the reasons for disbelieving in matter. Mind and matter were something like the lion and the unicorn fighting for the crown: the end of the battle is not the victory of one or the other, but the discovery that both are only heraldic inventions. The world consists of events, not of things that endure for a long time and have changing properties. Events can be collected into groups by their causal relations. If the causal relations are of one sort, the resulting group of events may be called a physical object, and if the causal relations are of another sort, the resulting group may be called a mind.

Thus, both mind and matter are merely convenient ways of organizing events. There can be no reason for supposing that either a piece of mind or a piece of matter is immortal. The sun is supposed to be losing matter at the rate of millions of tons a minute. The most essential characteristic of mind is memory, and there is no reason whatever to suppose that the memory associated with a given person survives that person's death. Indeed there is every reason to think the opposite, for memory is clearly connected with a certain kind of brain structure, and since this structure decays at death, there is every reason to suppose that memory also must cease. Although metaphysical materialism cannot be considered true, yet emotionally the world is pretty much the same as it would be if the materialists were in the right. I think the opponents of materialism have always been actuated by two main desires, the first to prove that the mind is important and the second to prove that the ultimate power in the universe is mental rather than physical. In both these respects, I think the materialists were in the right.

66. In the sentence 'To begin with the latter, some of them .... latter' refers to

- (1) physicists (2) matter  
(3) psychologists (4) mind

67. "But the Philosopher was apt to reduce it usually to ....." Here it refers to  
 (1) his analysis of man  
 (2) the human body  
 (3) the mind of man  
 (4) idea in the mind.
68. Plain man thinks that material objects exist because  
 (1) they constitute his metaphysic  
 (2) they are real in his thought process  
 (3) certain electrons and protons form them  
 (4) he can perceive them
69. Psychologists mentioned in the passage  
 (1) believe that mental activities get manifested in abnormal physical activities  
 (2) try to equate mental activity to physical activity  
 (3) do not accept the distinction between body and soul  
 (4) support the physicists's perception of a body.
70. Which of the following does the modern science support according to the passage?  
 (1) Mind and matter are necessary to organise events  
 (2) The metaphysical division of events.  
 (3) The discovery of the equally important mind and matter  
 (4) Mind or soul does not exist as an entity.
- GENERAL KNOWLEDGE & INSURANCE KNOWLEDGE**
71. The first metal to be used by man was  
 (1) aluminium (2) copper  
 (3) iron (4) silver
72. The present base year for calculating wholesale price index number is  
 (1) 1993-94  
 (2) 1991-92  
 (3) 1961-62  
 (4) 1950-51
73. For respiration in deep sea, divers use mixture of  
 (1) Oxygen and helium  
 (2) Oxygen and hydrogen  
 (3) Oxygen and carbon dioxide  
 (4) Oxygen and nitrogen
74. Who committed the most daring murder of Sir Curzon Wylie in 1907 in a public meeting in London?  
 (1) B.N. Dutta  
 (2) M.L. Dhingra  
 (3) Sardar Ajit Singh  
 (4) S.C. Chatterjee
75. The Supreme Court consists of a Chief Justice and  
 (1) 12 Judges  
 (2) 15 Judges  
 (3) 20 Judges  
 (4) 25 Judges
76. The International Day for Elimination of Racial Discrimination is observed on  
 (1) 20th February  
 (2) 21st February  
 (3) 20th March  
 (4) 21st March
77. 'New Horizons' spacecraft was launched by NASA to study which of the following planets?  
 (1) Mars (2) Pluto  
 (3) Jupiter (4) Mercury
78. Which of the following statements are true about '2011 World Cup' ?  
 A. India will host the 2011 World Cup Final.  
 B. The two semifinals of the mega event will be held in Pakistan and Sri Lanka.  
 C. The opening ceremony will be held in Bangladesh.  
 D. UAE will host the matches which will be played between India and Pakistan.  
 (1) only A, B and C  
 (2) only B, C and D  
 (3) only A, C and D  
 (4) Only A and D
79. Which of the following trophies is related with the game of 'Football' ?  
 (1) Mumbai Gold Cup  
 (2) Everest Cup  
 (3) Merdeka Cup  
 (4) V.C.C. Cup
80. On which date is Life Insurance Corporation of India completed its 50 years ?  
 (1) 5th July  
 (2) 3rd August  
 (3) 1st September  
 (4) 15th September
81. The minimum temperature at which a combustible substance catches fire is called :  
 (1) fireless temperature  
 (2) ignition temperature  
 (3) static temperature  
 (4) optimum temperature
82. The temple of Konark was built by Narasimha of the  
 (1) Maratha Administration  
 (2) Chola Administration  
 (3) Ganga Administration  
 (4) Vijayanagar Administration
83. Rigveda Samhita denotes one fourth of its hymns to  
 (1) Rudra (2) Marut  
 (3) Agni (4) Indra
84. Ahilyabai, the saintly queen of Maheshwar (Central India) belonged to which dynasty?  
 (1) Scindia dynasty  
 (2) Peshwa dynasty  
 (3) Holkar dynasty  
 (4) Rajput dynasty
85. Which one of the following is not a constitutional body ?  
 (1) Election Commission  
 (2) Union Public Service Commission  
 (3) Planning Commission  
 (4) Finance Commission
86. 'Nuclear Non-Proliferation Treaty (NPT)' has not yet been signed by  
 (1) India  
 (2) China  
 (3) Canada  
 (4) United Kingdom
87. Jadugoda mines are famous for  
 (1) iron ore  
 (2) mica deposits  
 (3) gold deposits  
 (4) uranium deposits
88. What is Value Added Tax (VAT) ?  
 (1) A single tax that replaces State Taxes like surcharge turnover tax, etc.  
 (2) A simple, transparent, easy to pay tax imposed on consumers.  
 (3) A new initiative taken by the Government to increase the tax burden of high income groups.  
 (4) A new tax to be imposed on the producers of capital goods
89. What is the name of the World's smallest republic which has an area of 21 sq.km. ?

- (1) Vatican City (2) Palermo  
(3) Namur (4) Nauru
- 90.** On January 10, 2007 India crossed another milestone with the successful launch of PSLV-C7 which injected into orbit for the first time four satellites, Cartosat-2, SRE-1, Lapan-Tubsat and Pehuensat-1. Which one of them is an earth observation satellite ?  
(1) Cartosat-2  
(2) SRE-1  
(3) Lapan-Tubsat  
(4) Pehuensat-1
- 91.** ONGC's exploration team has struck natural gas in KG-DWN-98/2 recently, which could lead to the country's biggest such find yet. The well's potential is preliminarily estimated at  
(1) 500 billion cubic metres of the hydrocarbon.  
(2) 600 billion cubic metres of the hydrocarbon.  
(3) 700 billion cubic metres of the hydrocarbon.  
(4) 800 billion cubic metres of the hydrocarbon.
- 92.** Which bank has launched India's first loan disbursement card recently ?  
(1) SBI (2) UTI  
(3) IDBI (4) ICICI
- 93.** The approach paper for the 11th Five Year Plan of India was approved by National Development Council in its meeting held on  
(1) 7th November  
(2) 20th November  
(3) 9th December  
(4) 10th January
- 94.** Who has been named "Businessman of the Year for 2006" by Forbes Asia ?  
(1) Nandan Nilekani  
(2) Mukesh Ambani  
(3) Vijay Mallya  
(4) Azim Premji
- 95.** Who is the 37th Chief Justice of India ?  
(1) Ram Jethmalani  
(2) Y.K. Sabharwal  
(3) Bijibhai Patnaik  
(4) K.G. Balkrishnan
- 96.** 'Diet' is a joint session of the Parliament of which nation ?  
(1) China (2) Japan  
(3) Vietnam (4) Germany
- 97.** Who is the author of the book, 'Amitabh-The Making of a Superstar' ?  
(1) Tushar Raheja  
(2) Vijay Singhvi  
(3) Susmita Das Gupta  
(4) Raj Kamal Jha
- 98.** Ban-ki-Moon who took oath on 14th December, 2006 as U.N. Secretary General belonged to  
(1) South Africa  
(2) South Korea  
(3) Zimbabwe  
(4) Yugoslavia
- 99.** The first woman in the world to successfully do a free fall parajump over the South Pole from a height of 12,000 feet in a minus 33 degree Celsius temperature, is  
(1) Sheetal Mahajan  
(2) Manisha Lamba  
(3) Kangna Ranaut  
(4) Neha Ahuja
- 100.** Paris is situated on the river  
(1) Danube (2) Seine  
(3) Tiber (4) Avon
- 101.** The Life Insurance had its origin in  
(1) New York (2) Rome  
(3) Moscow (4) Beijing
- 102.** Who constructed the first mortality table to provide a link between life insurance premium and the average life span based on statistical laws of mortality and coupon interest?  
(1) Joseph Dodson  
(2) Michael Dowe  
(3) Edmond Halley  
(4) Presbyterian Synod
- 103.** The first Insurance Act in India was passed in 1912. When did a detailed and amended act was passed to look into investments, expenditure and management of these companies' fund ?  
(1) 1938 (2) 1940  
(3) 1953 (4) 1961
- 104.** Oriental Life Insurance Company started by Europeans in Calcutta was the first Life Insurance Company on Indian soil. Life Insurance in its modern form came to India from England in the year :  
(1) 1808 (2) 1818  
(3) 1828 (4) 1838
- 105.** When was the Indian Insurance Act enacted to enable the government to collect statistical information about both life and non-life insurance business ?  
(1) 1912 (2) 1920  
(3) 1928 (4) 1938
- 106.** The birth place of social insurance is  
(1) England (2) Italy  
(3) America (4) Germany
- 107.** Which of the following is treated as the Evidence of the contract of life assurance ?  
(1) First receipt  
(2) Sum of the policy assured  
(3) The policy bond  
(4) None of these
- 108.** Which of the following is not correctly matched ?  
(1) New Bima Gold —  
4th September, 2006  
(2) Jeevan Akshay-V —  
20th September, 2006  
(3) Jeevan Tarang —  
2nd March, 2006  
(4) Amulya Jeevan —  
27th February, 2006
- 109.** Which of the following policies is not under the LIC Mutual Fund?  
(1) Jeevan Chhaya  
(2) Jeevan Akshay  
(3) Jeevan Dhara  
(4) Jeevan Navkishore
- 110.** The premium charged by the Life Insurance is calculated on the basis of  
(1) Mortality (2) Interest  
(3) Expenses  
(4) All of the above
- 111.** Which of the following is correctly matched ?  
(1) Pure risk— It exists when a situation is characterized by uncertainty as to whether or not loss will occur  
(2) Speculative — When an event can result in either a gain or a loss or status quo  
(3) Dynamic risk — Arising from changes that take place in every society  
(4) All of the above
- 112.** What is the similarity between insurance and reinsurance ?  
(1) Principle of almost good faith  
(2) Principle of indemnity

- (3) Conditional contracts  
(4) All of the above
- 113.** Revival and days of grace is a  
(1) Rider  
(2) Guarantee  
(3) Options  
(4) None of these
- 114.** If the amount of claim is Rs. 25 lakhs, which consumer court will hear the grievances of the consumer?  
(1) Ombudsman  
(2) State level  
(3) National level  
(4) District level
- 115.** Which of the following is not correctly matched ?  
(1) Endowment Policy — A claim may arise under such a plan either by death or maturity  
(2) Decreasing Term Insurance — The premium is level throughout the term but the benefit decreases annually  
(3) Term Insurance — Provides cover for life  
(4) Annuities — Refers to income or other financial provisions for retirement
- 116.** A person who acts as an arbitrator under section 114 of Insurance Act is  
(1) Ombudsman  
(2) Arbitrator  
(3) Councillor  
(4) Mediator
- 117.** Calculate surrender value :  
Sum assured Rs. 40,000  
Mode : Half yearly  
Term : 20 years  
Last premium due paid : 30th instalment premium  
Surrender value factor : Rs. 50  
(1) 10,000 (2) 15,000  
(3) 20,000 (4) 25,000
- 118.** Valid period for insurance agents license is  
(1) 2 years (2) 3 years  
(3) 4 years (4) 5 years
- 119.** Tendency on the part of standard life to get insurance by restoring to non-disclosure is known as  
(1) *Ad-idem*  
(2) *Contract de novo*  
(3) Suppression of material facts  
(4) Adverse selection
- 120.** When did the brokers regulation was passed ?  
(1) 1999 (2) 2000  
(3) 2001 (4) 2002
- 121.** Which of the following is not a feature of a successful re-insurance market ?  
(1) Mature financial markets  
(2) Locational advantage  
(3) Availability of knowledge capital  
(4) Role of foreign insurance
- 122.** Which of the following is not an example of liability loss exposerers?  
(1) Misuse of the internet and e-mail transmission of pronographic material  
(2) Environmental pollution  
(3) Standard product  
(4) Sexual harassment of employees
- 123.** In a mortgage redemption policy, the sum assured is payable  
(1) On termination  
(2) On death any time  
(3) At the end of the term  
(4) On death within the term
- 124.** Which of the following is correct?  
(1) Jeevan Suraksha — Retirement income  
(2) Jeevan Sneha — Without profit money back plan  
(3) Jeevan Sanchaya — Without profit money back type plan with provision of loyalty addition  
(4) All of the above
- 125.** Accidental insurance was started in  
(1) 1845 (2) 1870  
(3) 1940 (4) 1740
- 126.** If a policyholder is reported missing for more than seven years then  
(1) Maturity claim is payable  
(2) Death claim is payable assuming non-accidental death  
(3) Ex-gratia benefit is payable  
(4) None of these
- 127.** Insurer who begins to carry on life insurance business in the year 2000 or later is required to underwrite in the fifth financial year at least  
(1) 15% (2) 17.5%  
(3) 20% (4) 25%
- 128.** What does an office conduct a special enquiry in the case of death claim arose after 4 years?  
(1) For a large sum assured  
(2) On suspicion of suppression of material facts  
(3) As a precaution  
(4) As a routine
- 129.** For registration of insurance for Life Insurance Business, the minimum paid up equity capital of the insurer should be  
(1) 100 crores (2) 200 crores  
(3) 250 crores (4) None of these
- 130.** Which of the following is not correct ?  
(1) If loan is accumulated guaranteed surrender value is not payable.  
(2) Whole Life Insurance Plan is a type of Term Insurance Plan  
(3) A bank can not ensure the lives of its credit card holders  
(4) Money Back plan is a type of endowment plan
- 131.** When a fire breaks out it destroys the machinery, building and contacts of the insured firms. This damage is covered under the  
(1) Material damage policy  
(2) Capital loss policy  
(3) Property damage policy  
(4) None of these
- 132.** When did the Jeevan Shree Policy was withdrawn ?  
(1) January 2001  
(2) January 2002  
(3) January 2003  
(4) January 2004
- 133.** The fact which is material to the risk is decided by the  
(1) Proposer (2) Agent  
(3) Underwriters  
(4) None of these
- 134.** Which of the following policies has not been in produced by Oriental Insurance for the benefit of the farmers ?  
(1) Rice Insurance Policy  
(2) Krishak Kalyan Bima  
(3) Khalihan Bima Policy  
(4) Agricultural Tractor Policy
- 135.** When did personal social security scheme was introduced to help poor families whose annual income was Rs. 7200 or less ?  
(1) 1980 (2) 1985  
(3) 1990 (4) 1995

- 136.** Which of the following is a Term Assurance Policy ?  
 (1) Bima Sandesh Plan 94 of LIC  
 (2) Life guard of ICICI Prudential  
 (3) Term Care Plan of Bajaj Allianz  
 (4) None of these
- 137.** Which of the following is not true about New Jana Raksha Policy ?  
 (1) The policy will be issued to male lives only  
 (2) Policy will be issued with maximum age at entry of 40 years  
 (3) Policies will be issued for 12, 15 and 40 years only  
 (4) The maximum sum assured is Rs. 5000
- 138.** Which of the following is not true about Jeevan Akshay Policy ?  
 (1) No medical examination is necessary to get this policy  
 (2) Post-dated monthly cheques are sent in advance for the whole year.  
 (3) No person is paid  
 (4) The minimum amount to be invested is Rs. 10,000
- 139.** Which of the following LIC policies is not correctly matched ?  
 (1) Griha Laxmi Policy  
     — December, 1975  
 (2) Jana Raksha Policy  
     — June, 1981  
 (3) LIC Mutual Fund  
     — June, 1987  
 (4) Dhan 80 CCB (1)  
     — February, 1991
- 140.** The proposal form is to be signed by the  
 (1) The proposer and the life to be assured  
 (2) The proposer and witness by the third party  
 (3) The proposer and the agent  
 (4) 1 and 3
- 141.** In marine insurance loss due to roles and vermin is  
 (1) A statutory exclusion  
 (2) Floating policy  
 (3) Consequential loss  
 (4) None of these
- 142.** The large amounts in the life insurance company come by way of  
 (1) Interest on loans  
 (2) Premium and return on investment  
 (3) Lapsed policy  
 (4) None of these
- 143.** The rural insurance scheme is regulated by the  
 (1) IRDA  
 (2) Government of India  
 (3) Insurance Act of 1938  
 (4) None of these
- 144.** Under contributory scheme of the group insurance the minimum participation of employee must be  
 (1) 25%           (2) 50%  
 (3) 75%           (4) 100%
- 145.** Infirmities is related to  
 (1) Old age      (2) Sickness  
 (3) Loss of limbs  
 (4) All of the above
- 146.** By producing which document the duplicate policies are issued?  
 (1) Indemnity bond  
 (2) Guarantees  
 (3) Medical report  
 (4) None of these
- 147.** Policy acquires surrender value if runs for a period of  
 (1) 2 years      (2) 3 years  
 (3) 4 years      (4) 5 years
- 148.** Which of the following is not correct ?  
 (1) In life insurance contract; disability benefit can not be issued as a separate policy  
 (2) The policy holders has an option to choose the mode of payment of premium  
 (3) Revival of an insurance policy is a fresh contract  
 (4) Settlement option is related to both maturity and death proposal
- 149.** How does nomination gets automatically cancelled ?  
 (1) Assignment  
 (2) Consideration  
 (3) As per Trust Act  
 (4) Forfeiture
- 150.** Which of the following statements is not correct ?  
 (1) An insurance policy is a contract in itself as per Insurance Act, 1938  
 (2) Any dispute regarding insurance is referred to the Ombudsman  
 (3) Annuity plan provides guaranteed pension to the annuitant  
 (4) Financial underwriting is done to evaluate capacity of paying premium

## NUMERICAL ABILITY

- 151.** In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46, the dividend is :  
 (1) 4236           (2) 4306  
 (3) 4336           (4) 5336
- 152.** If  $1.5x = 0.04y$ , then the value of  $\left(\frac{y-x}{y+x}\right)$  is :  
 (1)  $\frac{730}{77}$            (2)  $\frac{73}{77}$   
 (3)  $\frac{7.3}{77}$            (4)  $\frac{703}{77}$
- 153.** An employee may claim Rs. 7.00 for each km when he travels by taxi and Rs. 6.00 for each km if he drives his own car. If in one week he claimed Rs. 675 for travelling 90 km, how many kms did he travel by taxi ?  
 (1) 135           (2) 155  
 (3) 162           (4) 170
- 154.** The square root of  $(3 + \sqrt{5})$  is :  
 (1)  $\left(\frac{\sqrt{3}}{2} + \frac{1}{\sqrt{2}}\right)$    (2)  $\left(\frac{\sqrt{3}}{2} - \frac{1}{2}\right)$   
 (3)  $\left(\frac{\sqrt{5}}{2} - \frac{1}{\sqrt{2}}\right)$    (4)  $\left(\frac{\sqrt{5}}{2} + \frac{1}{\sqrt{2}}\right)$
- 155.** The mean temperature of Monday to Wednesday was  $37^{\circ}\text{C}$  and of Tuesday to Thursday was  $34^{\circ}\text{C}$ . If the temperature on Thursday was  $\frac{4}{5}$ th that of Monday, then what was the temperature on Thursday ?  
 (1)  $36.5^{\circ}\text{C}$       (2)  $36^{\circ}\text{C}$   
 (3)  $35.5^{\circ}\text{C}$       (4)  $34^{\circ}\text{C}$
- 156.** A certain number of two digits is three times the sum of its digits. If 45 be added to it, the digits are reversed. The number is  
 (1) 72           (2) 32  
 (3) 27           (4) 23
- 157.** Three years ago the average age of A and B was 18 years. While C joining them now, the average becomes 22 years. How old (in years) is C now ?  
 (1) 24           (2) 27  
 (3) 28           (4) 30

158. If  $2^{2x-1} = \frac{1}{8^{x-3}}$ , then the value

of  $x$  is :

- (1) -1                      (2) -2  
(3) 2                         (4) 3

159. Aman's basic pay for a 40 hours' week is Rs. 200. Overtime is paid at 25% above the basic rate. In a certain week, he worked overtime and his total was Rs. 300. He therefore, worked for a total of (in hours) :

- (1) 52                        (2) 56  
(3) 58                        (4) 62

160. On a Rs. 10,000 payment order, a person has choice between 3 successive discounts of 10%, 10% and 30%, and 3 successive discounts of 40%, 5% and 5%. By choosing the better one he can save (in Rupees) :

- (1) 200                      (2) 255  
(3) 400                      (4) 433

161. Rs. 600 are divided among A, B and C so that Rs. 40 more than

$\frac{2}{5}$  th of A's share, Rs. 20 more than  $\frac{2}{7}$  th of B's share and Rs.

10 more than  $\frac{9}{17}$  th of C's may all be equal. What is A's share (in Rupees) ?

- (1) 150                      (2) 170  
(3) 200                      (4) 280

162. A, B and C started a business with their investment in the ratio 1 : 3 : 5. After 4 months, A invested the same amount as before and B as well as C withdrew half of their investments. The ratio of their profits at the end of the year was :

- (1) 5 : 6 : 10    (2) 6 : 5 : 10  
(3) 10 : 5 : 6    (4) 4 : 3 : 5

163. If 9 men working  $7\frac{1}{2}$  hours a

day can finish a piece of work in 20 days, then how many days will be taken by 12 men, working 6 hours a day to finish the work ? It is being given that 2 men of latter type work as much as 3 men of the former type ?

- (1)  $9\frac{1}{2}$                       (2) 11  
(3)  $12\frac{1}{2}$                       (4) 13

164. Three pipes A, B and C can fill a cistern in 6 hours. After working at it together for 2 hours, C is closed and A and B can fill the remaining part in 7 hours. The number of hours taken by C alone to fill the cistern is :

- (1) 12                        (2) 14  
(3) 16                        (4) 18

165. A train B speeding with 120 kmph crosses another train C running in the same direction, in 2 minutes. If the lengths of the trains B and C be 100m and 200m respectively, what is the speed (in kmph) of the train C ?

- (1) 111                        (2) 123  
(3) 127                        (4) 129

166. River is running at 2 kmph. It took a man twice as long to row up as to row down the river. The rate (in km ph) of the man in still water is :

- (1) 8                         (2) 10  
(3) 4                         (4) 6

167. A merchant has 1000 kg of sugar, part of which he sells at 8% profit and the rest at 18% profit. He gains 14% on the whole. The quantity (in kg.) sold at 18% profit is :

- (1) 560                        (2) 600  
(3) 400                        (4) 640

168. A sum of money becomes Rs. 13,380 after 3 years and Rs. 20,070 after 6 years on compound interest. The sum (in Rupees) is :

- (1) 8800                        (2) 8890  
(3) 8920                        (4) 9040

169. A well with 14m inside diameter is dug 10m deep. Earth taken out of it, has been evenly spread all around it to a width of 21m to form an embankment. The height (in metres) of the embankment is :

- (1)  $\frac{1}{2}$                         (2)  $\frac{2}{3}$   
(3)  $\frac{3}{4}$                         (4)  $\frac{3}{5}$

170. A rectangular carpet has an area of 120sq. metres and a perimeter of 46 metres. The length of its diagonal (in metres) is :

- (1) 11                         (2) 13  
(3) 15                         (4) 17

# ANSWER KEY AND SOLUTION

<b>1. (4)</b>	<b>2. (3)</b>	<b>3. (1)</b>	<b>4. (2)</b>
<b>5. (2)</b>	<b>6. (1)</b>	<b>7. (3)</b>	<b>8. (4)</b>
<b>9. (2)</b>	<b>10. (2)</b>	<b>11. (3)</b>	<b>12. (2)</b>
<b>13. (3)</b>	<b>14. (1)</b>	<b>15. (3)</b>	<b>16. (4)</b>
<b>17. (1)</b>	<b>18. (3)</b>	<b>19. (2)</b>	<b>20. (3)</b>
<b>21. (2)</b>	<b>22. (2)</b>	<b>23. (1)</b>	<b>24. (1)</b>
<b>25. (2)</b>	<b>26. (3)</b>	<b>27. (2)</b>	<b>28. (4)</b>
<b>29. (3)</b>	<b>30. (4)</b>	<b>31. (2)</b>	<b>32. (1)</b>
<b>33. (2)</b>	<b>34. (1)</b>	<b>35. (4)</b>	<b>36. (3)</b>
<b>37. (2)</b>	<b>38. (2)</b>	<b>39. (1)</b>	<b>40. (3)</b>
<b>41. (3)</b>	<b>42. (3)</b>	<b>43. (2)</b>	<b>44. (1)</b>
<b>45. (4)</b>	<b>46. (4)</b>	<b>47. (2)</b>	<b>48. (1)</b>
<b>49. (4)</b>	<b>50. (3)</b>	<b>51. (3)</b>	<b>52. (4)</b>
<b>53. (2)</b>	<b>54. (3)</b>	<b>55. (1)</b>	<b>56. (4)</b>
<b>57. (1)</b>	<b>58. (3)</b>	<b>59. (1)</b>	<b>60. (2)</b>
<b>61. (4)</b>	<b>62. (3)</b>	<b>63. (4)</b>	<b>64. (4)</b>
<b>65. (3)</b>	<b>66. (4)</b>	<b>67. (2)</b>	<b>68. (4)</b>
<b>69. (2)</b>	<b>70. (4)</b>	<b>71. (2)</b>	<b>72. (1)</b>
<b>73. (4)</b>	<b>74. (2)</b>	<b>75. (4)</b>	<b>76. (4)</b>
<b>77. (2)</b>	<b>78. (4)</b>	<b>79. (3)</b>	<b>80. (3)</b>
<b>81. (2)</b>	<b>82. (3)</b>	<b>83. (4)</b>	<b>84. (3)</b>
<b>85. (3)</b>	<b>86. (1)</b>	<b>87. (4)</b>	<b>88. (1)</b>
<b>89. (4)</b>	<b>90. (1)</b>	<b>91. (2)</b>	<b>92. (3)</b>
<b>93. (3)</b>	<b>94. (1)</b>	<b>95. (4)</b>	<b>96. (2)</b>
<b>97. (4)</b>	<b>98. (2)</b>	<b>99. (1)</b>	<b>100. (2)</b>
<b>101.(2)</b>	<b>102.(3)</b>	<b>103.(1)</b>	<b>104.(2)</b>
<b>105.(3)</b>	<b>106.(2)</b>	<b>107.(3)</b>	<b>108.(3)</b>
<b>109.(4)</b>	<b>110.(4)</b>	<b>111.(4)</b>	<b>112.(4)</b>
<b>113.(1)</b>	<b>114.(3)</b>	<b>115.(3)</b>	<b>116.(1)</b>
<b>117.(2)</b>	<b>118.(2)</b>	<b>119.(3)</b>	<b>120.(4)</b>
<b>121.(2)</b>	<b>122.(3)</b>	<b>123.(4)</b>	<b>124.(4)</b>
<b>125.(1)</b>	<b>126.(2)</b>	<b>127.(1)</b>	<b>128.(2)</b>
<b>129.(1)</b>	<b>130.(3)</b>	<b>131.(1)</b>	<b>132.(2)</b>
<b>133.(3)</b>	<b>134.(2)</b>	<b>135.(2)</b>	<b>136.(4)</b>
<b>137.(4)</b>	<b>138.(3)</b>	<b>139.(3)</b>	<b>140.(4)</b>
<b>141.(1)</b>	<b>142.(2)</b>	<b>143.(1)</b>	<b>144.(3)</b>
<b>145.(4)</b>	<b>146.(1)</b>	<b>147.(2)</b>	<b>148.(4)</b>
<b>149.(1)</b>	<b>150.(1)</b>	<b>151.(4)</b>	<b>152.(2)</b>
<b>153.(1)</b>	<b>154.(4)</b>	<b>155.(2)</b>	<b>156.(2)</b>
<b>157.(1)</b>	<b>158.(3)</b>	<b>159.(2)</b>	<b>160.(2)</b>
<b>161.(1)</b>	<b>162.(1)</b>	<b>163.(3)</b>	<b>164.(2)</b>
<b>165.(1)</b>	<b>166.(4)</b>	<b>167.(2)</b>	<b>168.(3)</b>
<b>169.(2)</b>	<b>170.(4)</b>		





$$1 - \frac{2}{75} = \frac{75-2}{75}$$

$$= \frac{73}{75}$$

$$1 + \frac{2}{75} = \frac{75+2}{75}$$

$$= \frac{77}{75}$$

$$= \frac{73}{75} \times \frac{75}{77} = \frac{73}{77}$$

153. (1) Let the employee travelled  $x$  kms by taxi.

$\therefore$  Distance covered by him by his own car =  $(90 - x)$  km.

According to the question,

$$x \times 7 + (90 - x) \times 6 = 675$$

$$\Rightarrow 7x + 540 - 6x = 675$$

$$x = 675 - 540 = 135$$

$\therefore$  Required distance = 135 km

154. (4) expression =  $\sqrt{3+\sqrt{5}}$

$$= \sqrt{\frac{2(3+\sqrt{5})}{2}} = \sqrt{\frac{6+2\sqrt{5}}{2}}$$

$$= \sqrt{\frac{5+1+2 \times \sqrt{5} \times 1}{2}}$$

$$= \sqrt{\frac{(\sqrt{5})^2 + (1)^2 + 2 \times \sqrt{5} \times 1}{2}}$$

$$= \sqrt{\frac{(\sqrt{5}+1)^2}{2}} = \frac{\sqrt{5}+1}{\sqrt{2}}$$

$$= \sqrt{\frac{5}{2}} + \sqrt{\frac{1}{2}}$$

155. (2)  $M + T + W = 3 \times 37$

$$= 111^\circ\text{C} \quad \dots (i)$$

$$T + W + Th = 3 \times 34$$

$$= 102^\circ\text{C} \quad \dots (ii)$$

Subtracting equation (ii) from equation (i),

$$M - Th = (111 - 102)^\circ\text{C}$$

$$\Rightarrow \frac{5}{4}Th - Th = 9^\circ\text{C}$$

$$\Rightarrow \frac{Th}{4} = 9^\circ\text{C} \Rightarrow Th = 9 \times 4$$

$$= 36^\circ\text{C}$$

156. (2) Let the two digit number be =  $10y + x$ .

According to the question,

$$10y + x = 3(x + y)$$

$$\Rightarrow 10y + x = 3x + 3y$$

$$\Rightarrow 10y - 3y + x - 3x = 0$$

$$\Rightarrow 7y - 2x = 0 \quad \dots (i)$$

$$\text{and } 10y + x + 45 = 10x + y$$

$$\Rightarrow 9x - 9y = 45$$

$$\Rightarrow 9(x - y) = 45$$

$$\Rightarrow x - y = \frac{45}{9} = 5$$

$$\Rightarrow x = y + 5 \quad \dots \dots \dots (ii)$$

$$\text{Now, } 7y - 2x = 0$$

$$\Rightarrow 7y - 2(y + 5) = 0$$

[From equation (ii)]

$$\Rightarrow 7y - 2y - 10 = 0$$

$$\Rightarrow 5y = 10$$

$$\Rightarrow y = \frac{10}{5} = 2$$

$\therefore$  From equation (ii),

$$x = 2 + 5 = 7$$

$$\therefore \text{Number} = 2 \times 10 + 7 = 27$$

**Note :** This problem can be easily solved by hit and trial method out of the given alternatives.

157. (1) Three years ago,

Sum of the ages of A and B

$$= 18 \times 2 = 36 \text{ years}$$

$\therefore$  Sum of the present ages of A and B

$$= 36 + 6 = 42 \text{ years}$$

Sum of the present ages of A, B and C

$$= 3 \times 22 = 66 \text{ years}$$

$\therefore$  Present age of C =  $66 - 42$

$$= 24 \text{ years}$$

158. (3)  $2^{2x-1} = \frac{1}{8^{x-3}} = 8^{-(x-3)}$

$$\Rightarrow 2^{2x-1} = 8^{3-x} = (2^3)^{(3-x)}$$

$$\Rightarrow 2^{2x-1} = 2^{9-3x}$$

$$\Rightarrow 2x-1 = 9-3x$$

$$\Rightarrow 2x+3x = 9+1$$

$$\Rightarrow 5x = 10$$

$$\Rightarrow x = \frac{10}{5} = 2$$

159. (2) Let the man worked overtime for  $x$  hours.

Basic pay of 40 hours

$$= \text{Rs. } 200.$$

$\therefore$  Basic pay of 1 hour =  $\frac{200}{40}$

$$= \text{Rs. } 5$$

According to the question,

$$200 + x \times \frac{5 \times 125}{100} = 300$$

$$\Rightarrow \frac{25}{4}x = 300 - 200$$

$$\Rightarrow x = \frac{100 \times 4}{25} = 16$$

$\therefore$  Total hours of work

$$= 40 + 16 = 56$$

160. (2) Selling price in the first case = 70% of 90% of 90% of Rs. 10000

$$= \frac{70}{100} \times \frac{90}{100} \times \frac{90}{100} \times 10000$$

$$= \text{Rs. } 5670$$

Selling price in the second case

$$= 95\% \text{ of } 95\% \text{ of } 60\% \text{ of Rs. } 10000$$

$$= \frac{95}{100} \times \frac{95}{100} \times \frac{60}{100} \times 10000$$

$$= \text{Rs. } 5415$$

$\therefore$  Saving = Rs.  $(5670 - 5415)$

$$= \text{Rs. } 255$$

161. (1) According to the question,

$$\frac{2}{5}A + 40 = \frac{2}{7}B + 20$$

$$= \frac{9}{17}C + 10 = x \text{ (let)}$$

$$\Rightarrow A = \frac{5}{2}(x - 40),$$

$$B = \frac{7}{2}(x - 20) \text{ and}$$

$$C = \frac{17}{9}(x - 10)$$

$$\therefore \frac{5}{2}(x - 40) + \frac{7}{2}(x - 20)$$

$$+ \frac{17}{9}(x - 10) = 600$$

$$45(x - 40) + 63(x - 20)$$

$$\Rightarrow \frac{+34(x - 10)}{18} = 600$$

$$\Rightarrow \frac{45x - 1800 + 63x - 1260 + 34x - 340}{18} = 600$$

$$\Rightarrow 142x - 3400 = 18 \times 600$$

$$\Rightarrow 142x = 10800 + 3400$$

$$= 14200$$

$$\Rightarrow x = \frac{14200}{142} = 100$$

$$\therefore \text{A' share} = \frac{5}{2}(100 - 40)$$

$$= \text{Rs. } \left( \frac{5}{2} \times 60 \right) = \text{Rs. } 150$$

**162. (1)** Let their initial investments be Rs.  $x$ , Rs.  $3x$  and Rs.  $5x$  respectively. Then,

$$\begin{aligned} A : B : C &= (x \times 4 + 2x \times 8) : (3x \times 4 + \frac{3x}{2} \times 8) : (5x \times 4 + \frac{5x}{2} \times 8) \\ &= (4x + 16x) : (12x + 12x) : (20x + 20x) = 20x : 24x : 40x \\ &= 5 : 6 : 10 \end{aligned}$$

**163. (3)** More men, less days (Indirect)  
Less hrs/day, more days (Indirect)  
Less efficiency, more days (Indirect)

$$\left. \begin{array}{l} \text{Men} \quad 12 : 9 \\ \text{Hrs / day} \quad 6 : \frac{15}{2} \\ \text{Efficiency} \quad \frac{1}{2} : \frac{1}{3} \end{array} \right\} \therefore 20 : x$$

$$\therefore 12 \times 6 \times \frac{1}{2} \times x = 9 \times \frac{15}{2} \times \frac{1}{3} \times 20$$

$$\Rightarrow x = \frac{9 \times 15 \times 2 \times 20}{2 \times 3 \times 12 \times 6}$$

$$= \frac{25}{2} = 12\frac{1}{2}$$

$$\begin{aligned} \therefore \text{Required number of days} &= 12\frac{1}{2} \end{aligned}$$

**164. (2)** Part of the tank filled by three pipes (A + B + C) in 1 hour

$$= \frac{1}{6}$$

$$\therefore \text{Part filled in 2 hours} = \frac{2}{6} = \frac{1}{3}$$

$$\text{Remaining part} = 1 - \frac{1}{3} = \frac{2}{3}$$

$$\text{Part filled by (A + B) in 7 hours} = \frac{2}{3}$$

$$\therefore (A + B)\text{'s 1 hour's work} = \frac{2}{21}$$

$$\begin{aligned} \therefore \text{Part filled by C in 1 hour} &= \text{Part filled by (A + B + C) in 1 hour} \\ &- \text{Part filled by (A + B) in 1 hour} \end{aligned}$$

$$= \frac{1}{6} - \frac{2}{21} = \frac{14 - 8}{84} = \frac{6}{84} = \frac{1}{14}$$

$\therefore$  C alone can fill the tank in 14 hours.

**165. (1)** Let the speed of train C be  $x$  kmph.

$$\begin{aligned} \text{Speed of train B relative to C} &= (120 - x) \text{ kmph} \end{aligned}$$

$$= \left[ (120 - x) \times \frac{5}{18} \right] \text{ m/sec}$$

$$= \left( \frac{600 - 5x}{18} \right) \text{ m/sec}$$

$$\begin{aligned} \text{Distance covered} &= 100 + 200 = 300 \text{ m} \end{aligned}$$

$$\therefore \frac{300}{\left( \frac{600 - 5x}{18} \right)} = 120$$

$$\Rightarrow 300 = \frac{120(600 - 5x)}{18}$$

$$\Rightarrow 10 \times 9 = 2(600 - 5x)$$

$$\Rightarrow 90 = 1200 - 10x$$

$$\Rightarrow 10x = 1200 - 90$$

$$\Rightarrow x = \frac{1110}{10} = 111$$

Hence, the speed of train C is 111 kmph.

**166. (4)** Let rate upstream be  $x$  kmph.

$$\begin{aligned} \text{Then, rate downstream} &= 2x \text{ kmph} \end{aligned}$$

$\therefore$  Rate of current

$$\frac{1}{2}(2x - x) = \frac{x}{2} \text{ kmph}$$

$$\therefore \frac{x}{2} = 2 \Rightarrow x = 4$$

$$\therefore \text{Rate upstream} = 4 \text{ kmph}$$

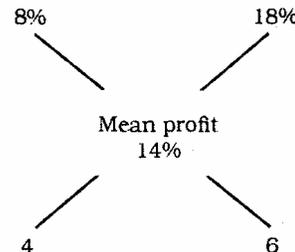
$$\text{Rate downstream} = 8 \text{ kmph}$$

$\therefore$  Rate in still water

$$= \frac{1}{2}(8 + 4) = 6 \text{ kmph}$$

**167. (2)**

Profit on first part    Profit on second part



Ratio of first and second parts = 4 : 6 = 2 : 3

$\therefore$  Quantity of 2nd part

$$= \left( \frac{3}{5} \times 1000 \right) \text{ kg}$$

$$= 600 \text{ kg}$$

**168. (3)** Let the sum be Rs.  $x$ . Then,

$$x \left( 1 + \frac{R}{100} \right)^3 = 13380 \quad \dots\dots (i)$$

and,

$$x \left( 1 + \frac{R}{100} \right)^6 = 20070 \quad \dots\dots (ii)$$

Dividing equation (ii) by (i),

$$\left( 1 + \frac{R}{100} \right)^3 = \frac{20070}{13380} = \frac{3}{2}$$

From equation (i),

$$x \times \frac{3}{2} = 13380$$

$$\Rightarrow x = 13380 \times \frac{2}{3} = 8920$$

Hence, the sum is Rs. 8920.

**169. (2)** Volume of earth dug out

$$= \left( \frac{22}{7} \times 7 \times 7 \times 10 \right) \text{ m}^3$$

$$= 1540 \text{ m}^3$$

Area of embankment

$$= \frac{22}{7} \left[ (28)^2 - (7)^2 \right] \text{ m}^2$$

$$= \frac{22}{7} \times (28 + 7)(28 - 7) \text{ m}^2$$

$$= \frac{22}{7} \times 35 \times 21 \text{ m}^2 = 2310 \text{ m}^2$$

$\therefore$  Height of embankment

$$= \frac{\text{Volume}}{\text{Area}} = \frac{1540}{2310} \text{ m}$$

$$= \frac{2}{3} \text{ m}$$

**170. (4)** Let the length of carpet

=  $a$  m and breadth =  $b$  m.

Then,

$$2(a + b) = 46$$

$$\Rightarrow a + b = 23$$

$$\text{Again, } ab = 120$$

$$\therefore \text{Diagonal} = \sqrt{a^2 + b^2}$$

$$= \sqrt{(a + b)^2 - 2ab}$$

$$= \sqrt{(23)^2 - 240} = \sqrt{529 - 240}$$

$$= \sqrt{289} = 17 \text{ m}$$