Section-I

Language comprehension

Directions for question 1 to 5:
Read the following passage carefully and then answer these questions based on what is stated or implied in the passage.

We call a man irrational when he acts in a passion, when he cuts off his nose to spite his face. He is irrational because he forgets that, by indulging the desire which he happens to feel most strongly at the moment, he will thwart other desires which in the long run are more important to him. If men were rational, they would take a more correct view of their own interest than they do at present; and if all men acted from enlightened self-interest the world would be a paradise in comparison with what it is. I do not maintain that there is nothing better than self-interest as a motive to action; but I do maintain that self-interest, like altruism, is better when it is enlightened than when it is unenlightened. In an ordered community it is very rarely to a man’s interest to do anything which is very harmful to others. The less rational a man is, the oftener he will fail to perceive how what injures others also injures him, because hatred or envy will blind him. Therefore, although I do not pretend that enlightened self-interest is the highest morality, I do maintain that, if it became common, it would make the world an immeasurably better place than it is.

Rationality in practice may be defined as the habit of remembering all our relevant desires, and not only the one which happens at the moment to be strongest. Like rationality in opinion, it is a matter of degree. Complete rationality is no doubt an unattainable ideal, but so long as we continue to classify some men as lunatics it is clear that we think some men more rational than others. I believe that all solid progress in the world consists of an increase in rationality, both practical and theoretical. To preach an altruistic morality appears to me somewhat useless, because it will appeal only to those who already have altruistic desires. But to preach rationality is somewhat different, since rationality helps us to realise our own desires on the whole, whatever they may be.

A man is rational in proportion as his intelligence informs and controls his desires. I believe that the control of our acts by our intelligence is ultimately what is of most importance, and that alone will make social life remain possible as science increases the means at our disposal for injuring each other. Education, the press, politics, religion—in a word, all the great forces in the world—are at present on the side of irrationality, they are in the hands of men who flatter King Demos in order to lead him astray. The remedy does not lie in anything heroically cataclysmic, but in the efforts of individuals towards a more sane and balanced view of our relations to our neighbours and to the world. It is to intelligence, increasingly side-spread, that we must look for the solution of the ills from which our world is suffering.

1. What is the central idea of the passage?
   1) The problems of the world can best be solved by rationality and enlightened self-interest.
   2) Altruism and rationality are the main indicators of intelligence.
   3) Altruism can make this world a heaven.
   4) Man is absolutely irrational.

2. What is the author’s attitude to modern development in science and communications?
   1) Cynical about their use.
   2) Sceptical about the uses they are put to.
   3) One of cautious acceptance.
4) One of concern about their harmful potential.

3. Rationality, according to the passage means mainly
   1) Having regard for others.
   2) Intelligent control of one's desires.
   3) The ability to cultivate a balanced view of one's surroundings.
   4) Power to resist yielding to strong passions.

4. The author feels that it is impractical to appeal to altruism because
   1) Not all people are altruistic by nature.
   2) Altruism is weaker than rationality.
   3) Altruism is more refined than rationality.
   4) None of the above.

5. The King Demos' refers to
   1) Populace
   2) Politician
   3) Scientist
   4) Despot

Directions for question 6 to 10: Read the following passage carefully and then answer these questions based on it.

Over four hundred years after his death, scholars are still travelling the mysteries of Michelangelo's art. Recently one mystery that was revealed was that his famous drawing of a pensive Cleopatra included a hidden drawing of a different Cleopatra on the reverse side. This hidden Cleopatra shows a tormented woman, whose eyes stare out at the viewer and whose mouth is open, screaming in horror. The two images, drawn on two sides of the same paper, can be viewed simultaneously. A second mystery concerns Michelangelo's architectural plan for the dome of St Peter's Basilica in Rome. Did he intend for the dome to look like the model he built between 1558 and 1561? Or did he change his mind after building the model and decide to elevate the dome in the way it is today? Scholars do not agree on the answer. A third mystery about one of the greatest artists who ever lived was why he destroyed hundreds or thousands of his drawings before he died. Did he feel they were unimportant? Did he want posterity to see only his finished products?

6. It can be inferred from the passage that the most unusual aspect of the Cleopatra drawing is that
   1) The figure is tormented.
   2) The figure is screaming.
   3) One drawing is hidden.
   4) One drawing is backward.

7. The word 'pensive' (underlined) can best be substituted with the word
   1) Angry
   2) Happy
   3) Anxious
   4) Thoughtful

8. The dome of St Peter's Basilica
1) Bears no relation to the one in the model.
2) Was destroyed after the model was built.
3) Is raised more than the one in the model.
4) Follows the plan of the model.

9. According to the passage, Michelangelo is
   1) A private person.
   2) One of the greatest artists in the world.
   3) The most famous architect in Rome.
   4) Screaming in horror.

10. Why did Michelangelo destroy so many drawings before he died?
    1) Nobody knows.
    2) They were unimportant.
    3) They were only drafts.
    4) He had changed the drawings.

In these questions, choose the word from the alternatives (1), (2), (3) and (4) that is similar in meaning to the word given in capital letters.

11. GIST
    1) Contribution
    2) Substance
    3) Prestige
    4) Accessory

12. SOLICITOUS
    1) Nonchalant
    2) Firm
    3) Reverential
    4) Worried

13. HOMELY
    1) Refined
    2) Plain
    3) Reliable
    4) Amiable

14. LOQUACIOUS
    1) Verbose
    2) Taciturn
    3) Rational
    4) Alluring

15. PACIFY
    1) Placate
2) Rouse  
3) Harass  
4) Rejoice  

In these questions, choose the word from the alternatives (1), (2), (3) and (4) that is opposite in meaning to the word given in capital letters.

16. PERTINENT
   1) Appropriate  
   2) Pleasant  
   3) Extraneous  
   4) Paltry  

17. SLOPPY
   1) Meticulous  
   2) Inappropriate  
   3) Robust  
   4) Gullible  

18. WANTON
   1) Sportive  
   2) Ardent  
   3) Fragile  
   4) Discreet  

19. FINESSE
   1) Atrocity  
   2) Weakness  
   3) Tact  
   4) Clumsiness  

20. IGNITE
   1) Kindle  
   2) Attach  
   3) Extinguish  
   4) Split  

In each of these questions, a related pair of words is followed by four pairs of words (1), (2), (3) and (4). Choose the pair that best expresses a relationship similar to that expressed in the given pair.

21. DRILL : BORE ::
   1) Painter : brush  
   2) Sieve : sift  
   3) Helmet : head  
   4) Mason : wall
22. DOE : STAG : :
   1) Horse : colt
   2) Dog : kennel
   3) Duck : drake
   4) Sheep : flock

23. PHILATELIST : STAMPS : :
   1) Carpenter : saw
   2) Runner : sneakers
   3) Numismatist : coins
   4) Astrologer : predictions

24. UMPIRE : GAME : :
   1) Chef : banquet
   2) Legislator : election
   3) Moderator : debate
   4) Prodigy : wonder

25. NUCLEUS : CELL : :
   1) Rind : melon
   2) Web : spider
   3) Stalk : corn
   4) Yolk : egg

Each of the sentences in these questions has a blank indicating that something has been omitted. Beneath each sentence, four choices of words or phrases (1), (2), (3) and (4) are given. Choose the one that best fits the meaning of the sentence as a whole.

26. Criticism that tears down without suggesting areas of improvement is not _______ and should be avoided if possible.
   1) Constructive
   2) Mandatory
   3) Pertinent
   4) Sagacious

27. Many educators believe that bilingual education has proved to have definite _______ education in any one tongue.
   1) Correlations with
   2) Limitations on
   3) Advantages over
   4) Connotations for

28. Ballet dancers, _______ actors, must spend many hours a day practising before a performance.
   1) Like
   2) The like
   3) The same
4) Same as

29. The weather in the far north is not ______ it is down south.
   1) Like humid as
   2) As humid as
   3) Humid as
   4) So humid that

30. Language, culture and personality may be considered independently of each other in thought, but they are ______ in fact.
   1) Equivocal
   2) Pervasive
   3) Inseparable
   4) Autonomous

   In these questions, each sentence has four underlined portions marked A, B, C and D. Choose that portion which must be changed so that the sentence becomes correct.

31. River water pollution (A) is often indicate (B) by (C) algae distribution. (D)
   1) A
   2) B
   3) C
   4) D

32. The ways of communication (A) has (B) changed dramatically (C) since (D) the last century.
   1) A
   2) B
   3) C
   4) D

33. Which (A) determines a (B) good meal varies (C) from country to (D) country.
   1) A
   2) B
   3) C
   4) D

34. Gandhiji lived a noble life of fasting (A) and poverty (B) in order to work for peaceful (C) and in dependence (D)
   1) A
   2) B
   3) C
   4) D

35. The first year of child’s life is (A) characterised (B) in (C) rapid physical (D) growth.
   1) A
   2) B
   3) C
   4) D

   In each of these questions, an idiomatic expression is given. Choose the correct choice which expresses the meaning to the given expression from the four options (1), (2), (3) and (4).

36. To smell a rat
   1) Signs of plague epidemic
   2) Bad smell
   3) Suspect foul dealings
   4) To be in a bad mood

37. To be above board
   1) To have a good height
   2) To be honest in any deal
   3) To have no debts
4) To be able to swim

38. To have the gift of the gab
   1) A talent for speaking
   2) To do exactly the right thing
   3) To be cheerful
   4) To get lots of gifts

39. To fall flat
   1) Retreat
   2) Met accidentally
   3) Quarrel
   4) To be met with a cold reception

40. Right-hand man
   1) An honest person
   2) Most efficient assistant
   3) One who cannot use his left hand
   4) A foolish person

Section-II
Mathematical Skills

41. Walking at 3/4 of his usual pace, a man reaches his office 20 minutes late. Find his usual time.
   1) 2 hrs
   2) 1 hr
   3) 3 hrs
   4) 4 hrs

42. If the difference between the simple and the compound interests on some principal amount at 20% for 3 years is Rs 48, then the principal amount must be
   1) Rs 650
   2) Rs 600
   3) Rs 375
   4) Rs 400

43. In a zoo, there are rabbits and pigeons. If their heads are counted, these are 90 while their legs are 224. Find the number of pigeons in the zoo.
   1) 70
   2) 68
   3) 72
   4) 22

44. The sides of a rectangular field are in the ratio 3 : 4 with its area as 7500 sq m. The cost of fencing the field @ 25-paise per metre is
   1) Rs 87.50
   2) Rs 86.50
   3) Rs 67.50
   4) Rs 55.50
45. A and B together can do a piece of work in 6 days. A alone can do it in 10 days. What time will B require to do it alone?
   1) 20 days
   2) 15 days
   3) 25 days
   4) 30 days

46. A square and an equilateral triangle have the same perimeter. If the diagonal of the square is $12\sqrt{2}$ cm, then the area of the triangle is
   1) $24\sqrt{3}$ cm$^2$
   2) $24\sqrt{2}$ cm$^2$
   3) $64\sqrt{3}$ cm$^2$
   4) $32\sqrt{3}$ cm$^2$

47. A cistern is filled in 5 hours and it takes 6 hours when there is a leak in its bottom. If the cistern is full, in what time shall the leak empty it?
   1) 6 hrs
   2) 5 hrs
   3) 30 hrs
   4) 15 hrs

48. The radius of the circumcircle of an equilateral triangle of side 12 cm is
   1) $(4/3)\sqrt{3}$ cm
   2) $4\sqrt{3}$ cm
   3) $4\sqrt{2}$ cm
   4) $(4/3)\sqrt{2}$ cm

49. The sides of a triangle are 6 cm, 11 cm and 15 cm. The radius of its incircle is
   1) $(5\sqrt{2})/4$ cm
   2) $3\sqrt{2}$ cm
   3) $6\sqrt{2}$ cm
   4) $(4\sqrt{2})/5$ cm

50. The sum of the interior angles of a polygon is 1620. The number of sides of the polygon must be
   1) 9
   2) 11
   3) 15
   4) 12

51. The distance between the tops of two trees 20 m and 28 m high is 17 m. The horizontal distance between the two trees is
   1) 9 m
   2) 11 m
   3) 15 m
   4) 31 m

52. Rs 770 have been divided among A, B and C such that A receives $2/9$th of what B and C together
receive. Then A's share is
1) Rs 140
2) Rs 154
3) Rs 165
4) Rs 170

53. What least number must be subtracted from each of the numbers 14, 17, 34 and 42 so that the
remainders are proportional?
1) 0
2) 1
3) 2
4) 7

54. $3\pi/5$ radians is equal to
1) 108
2) 54
3) 100
4) 81

55. If $\sin A : \cos A = 4 : 7$, then the value of $((7 \sin A - 3 \cos A)/(7 \sin A + 2 \cos A))$ is
1) $3/14$
2) $3/2$
3) $1/3$
4) $1/6$

56. A tree breaks due to storm and the broken part bends so that the top of the tree first touches the
ground, making an angle of 30 with the horizontal. The distance from the foot of the tree to the
point where the top touches the ground is 10 m. The height of the tree is
1) $10(\sqrt{3} + 1)$ m
2) $10\sqrt{3}$ m
3) $10(\sqrt{3} - 1)$ m
4) $(10/\sqrt{3})$ m

57. If $pqr = 1$ then
$((1/(1 + p + q^{-1})) + (1/(1 + q + r^{-1})) + (1/(1 + r + p^{-1})))$ is equal to
1) 1
2) $pq$
3) qr
4) $1/pq$

58. An edge of a cube measures 10 cm. If the largest possible cone is cut out of this cube, then the
volume of the cone is
1) 260 cm$^3$
2) 260.9 cm$^3$
3) 261.9 cm$^3$
4) 262.7 cm$^3$

59. If a solid sphere of radius 10 cm is moulded into 8 spherical solid balls of equal radius, then the
surface area of each ball is
1) $60\pi$ cm$^2$
2) $50\pi$ cm$^2$
3) $75\pi$ cm$^2$
4) $100\pi$ cm$^2$

60. If $a$ and $b$ are the roots of the equation $x^2 - 6x + 6 = 0$, then the value of $a^2 + b^2$ is
1) 36
2) 24
3) 12
4) 6
61. If \(a : b = 2 : 5\) then \((3a + 4b) : (5a + 6b)\) is equal to
   1) 13/20
   2) 26/33
   3) 16/27
   4) 18/35

62. The value of \((1^3 + 2^3 + 3^3 + \ldots + 15^3) - (1 + 2 + 3 + \ldots + 15)\) is
   1) 14280
   2) 14400
   3) 12280
   4) 13280

63. In the figure given below, O is the centre of the circle. If \(\angle OBC = 37^\circ\), the \(\angle BAC\) is equal to
   ![Diagram]
   1) 74
   2) 106
   3) 53
   4) 37

64. A horse is tethered to one corner of a rectangular grassy field 40 m by 24 m with a rope 14 m long. Over how much area of the field can it graze?
   1) 154 m\(^2\)
   2) 308 m\(^2\)
   3) 150 m\(^2\)
   4) None of these

65. A two-digit number is such that the product of the digits is 14. When 45 is added to the number, then the digits interchange their places. Find the number.
   1) 72
   2) 27
   3) 37
   4) 14

66. Vishal goes to a shop to buy a radio costing Rs 2568. The rate of sales tax is 7%. He tells the shopkeeper to reduce the price of the radio to such an extent that he has to pay Rs 2568, inclusive of sales tax. Find the reduction needed in the price of the radio.
   1) Rs 179.76
   2) Rs 170
   3) Rs 168
   4) Rs 169

67. Dinesh travels 760 km to his home, partly by train and partly by car. He takes 8 hours if he travels 160 km by train and the rest by car. He takes 12 minutes more if he travels 240 km by train and the rest by car. The speeds of the train and the car respectively are
   1) 80 km/hr, 100 km/hr
   2) 100 km/hr, 80 km/hr
   3) 120 km/hr, 100 km/hr
4) 100 km/hr, 120 km/hr

68. A person on tour has Rs 360 for his daily expenses. If he extends his tour for 4 days, he has to cut his daily expenses by Rs 3. Find the original duration of the tour.
   1) 15 days
   2) 30 days
   3) 20 days
   4) 24 days

69. Rs 6500 were divided equally among a certain number of persons. Had there been 15 more persons, each would have got Rs 30 less. Find the original number of persons.
   1) 50
   2) 60
   3) 40
   4) 55

70. Pipes A and B running together can fill a cistern in 6 minutes. If B takes 5 minutes more than A to fill the cistern, then the times in which A and B will fill the cistern separately will be respectively
   1) 15 minutes, 20 minutes
   2) 15 minutes, 10 minutes
   3) 10 minutes, 15 minutes
   4) 25 minutes, 20 minutes

71. In a flight of 3000 km, an aircraft was slowed down by bad weather. Its average speed for the trip was reduced by 100 km/hour and the time increased by one hour. Find the original duration of the flight.
   1) 5 hours
   2) 6 hours
   3) 4 hours
   4) 10 hours

72. Students of a class are made to stand in rows. If 4 students are extra in a row, there would be 2 rows less. If 4 students are less in a row, there would be 4 more rows. Find the number of students in the class.
   1) 86
   2) 106
   3) 96
   4) Cannot be determined

73. Four different objects 1, 2, 3, 4 are distributed at random in four places marked 1, 2, 3, 4. What is the probability that none of the objects occupy the place corresponding to its number?
   1) 17/24
   2) 3/8
   3) 1/2
   4) 5/8

74. A boat goes 24 km upstream and 28 km downstream in 6 hours. If it goes 30 km upstream and 21 km downstream in 6 hours and 30 minutes, find the speed of the stream.
   1) 10 km/hr
   2) 5 km/hr
   3) 4 km/hr
   4) 6 km/hr
75. The diameter of a cycle wheel is 70 cm. A cyclist takes 30 hours to reach a destination at the speed of 22 km/hr. How many revolutions will the wheel make during this journey?
   1) 3 million
   2) 3 lakh
   3) 4 lakh
   4) None of these

76. Shyam had 85 currency notes in all, some of which were of Rs 100 denomination and the remaining of Rs 50 denomination. The total amount of all these currency notes was Rs 5000. How much amount in rupees did he have in the denomination of Rs 50?
   1) 3500
   2) 70
   3) 15
   4) 1500

77. A car owner buys petrol at Rs 7.50, Rs 8.00 and Rs 8.50 per litre for three successive years. What approximately is the average cost per litre of petrol if he spends Rs 4000 each year?
   1) Rs 8
   2) Rs 9
   3) Rs 7.98
   4) Rs 8.50

78. If 10 years are subtracted from the present age of Ram and the remainder divided by 14, then you would get the present age of his grandson Shyam. If Shyam is 9 years younger to Sunder whose age is 14, then what is the present age of Ram?
   1) 80 years
   2) 70 years
   3) 60 years
   4) None of these

79. Sunder purchased an office bag with a price tag of Rs 600 in a sale where 25% discount was being offered on the tag price. He was given a further discount of 10% on the amount arrived at after giving usual 25% discount. What was the final amount paid by Sunder?
   1) Rs 210
   2) Rs 540
   3) Rs 405
   4) Rs 450

80. The mean of 30 values was 150. It was detected on rechecking that one value 165 was wrongly copied as 135 for the computation of the mean. Find the correct mean.
   1) 151
   2) 149
   3) 152
   4) None of these

Section-III
Data Analysis and Sufficiency
The following table gives the enrolment in Higher Secondary Schools in 1978. Study the table carefully and answer these questions.
81. What is the approximate percentage of schools, where the enrolment was below 120?
   1) 59.16  2) 59.27  3) 60  4) 61

82. What is the approximate percentage of schools, where the enrolment was above 79 but below 180?
   1) 56  2) 56.39  3) 57  4) 55

83. Under which class, the maximum number of schools fall?
   1) 100-119
   2) 80-99
   3) 60-79
   4) None of these

84. What is the approximate percentage of the least number of schools for the classes of enrolment?
   1) 8  2) 9.5  3) 9  4) 10

85. What is the number of schools where the enrolment is above 99 but below 160?
   1) 2550  2) 2033  3) 1833  4) 1316

86. What is the average enrolment per HS School?
   1) 107.87
   2) 217.60
   3) 109.5
   4) 129.5

Directions for question 87 to 96:
The following table gives Population and Activities of Indian Children (1993-94). Study the table carefully and answer these questions.

### POPULATION AND ACTIVITIES OF INDIAN CHILDREN (1993-94)

<table>
<thead>
<tr>
<th>Age/Gender Groups</th>
<th>Total Population (Millions)</th>
<th>In School</th>
<th>Not in school and working</th>
<th>Not in school and not working</th>
<th>Total Child Population not in School (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural males (5-9)</td>
<td>39.7</td>
<td>67.2</td>
<td>1.3</td>
<td>31.5</td>
<td>13.02</td>
</tr>
<tr>
<td>Rural females (5-9)</td>
<td>35.7</td>
<td>56.2</td>
<td>3.0</td>
<td>40.8</td>
<td>15.63</td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Urban males (5-9)</td>
<td>11.3</td>
<td>84.1</td>
<td>0.3</td>
<td>15.2</td>
<td>1.79</td>
</tr>
<tr>
<td>Urban females (5-9)</td>
<td>10.2</td>
<td>80.1</td>
<td>1.3</td>
<td>18.6</td>
<td>2.02</td>
</tr>
<tr>
<td>Rural males (10-14)</td>
<td>36.1</td>
<td>76.6</td>
<td>12.8</td>
<td>10.6</td>
<td>8.44</td>
</tr>
<tr>
<td>Rural females (10-14)</td>
<td>30.3</td>
<td>55.7</td>
<td>30.3</td>
<td>14.0</td>
<td>13.42</td>
</tr>
<tr>
<td>Urban males (10-14)</td>
<td>11.7</td>
<td>87.2</td>
<td>7.0</td>
<td>5.8</td>
<td>1.50</td>
</tr>
<tr>
<td>Urban females (10-14)</td>
<td>10.5</td>
<td>81.6</td>
<td>13.1</td>
<td>5.3</td>
<td>1.93</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>185.5</td>
<td></td>
<td>75</td>
<td></td>
<td>57.75</td>
</tr>
</tbody>
</table>

87. What is the average of Rural Males Population in millions?
   1) 36.1  
   2) 39.7  
   3) 37.9  
   4) 30.3

88. In which category of population, there is the lowest percentage of children in the school?
   1) Urban males 5-9
   2) Rural males 5-9
   3) Urban females 5-9
   4) Rural females 10-14

89. What is the approximate percentage of children of all categories not in school?
   1) 40.8
   2) 31.5
   3) 30.5
   4) 31.13

90. What per cent is the ratio between urban males and rural males not in school?
   1) 16
   2) 18
   3) 15.33
   4) None of these

91. What is the approximate number of children in millions who are working?
   1) 17
   2) 18
   3) 19
   4) 16

92. What is the approximate percentage of all categories of children not in school and not working?
   1) 20.06
   2) 21.56
   3) 22.36
   4) None of these

93. In which category of children, there is maximum number not in school and not working?
   1) Rural females 10-14
   2) Rural males 5-9
   3) Rural females 5-9
   4) Urban males 10-14
94. In which category of children, there is maximum number not in school but working?
   1) Rural males 10-14
   2) Rural females 10-14
   3) Urban females 10-14
   4) Urban males 10-14

95. What percentage of the total population of the children of all categories is in the school?
   1) 68.87
   2) 69.87
   3) 67.9
   4) 68.80

96. What approximately is the percentage ratio between the total number of children not in school and in school?
   1) 50.20
   2) 44.20
   3) 45.20
   4) 46.20

Directions for question 97 to 106 : Study the following graph and answer these questions given below it.

![Graph: Tea in India (in million kg)]
97. Which year shows the maximum percentage of export with respect to production?
   1) 1992  
   2) 1993  
   3) 1996  
   4) 1995

98. The population of India in 1993 was
   1) 800 million  
   2) 1080 million  
   3) 985 million  
   4) 900 million

99. If the area under tea production was less by 10% in 1994 than in 1993, then the approximate rate of increase in productivity of tea in 1994 was
   1) 97.2  
   2) 3  
   3) 35  
   4) Cannot be determined

100. The average proportion of tea exported to the tea produced over the period is
    1) 0.87  
    2) 0.47  
    3) 0.48  
    4) 0.66

101. What is the first half decade’s average per capita availability of tea?
    1) 457 gm  
    2) 535 gm  
    3) 446 gm  
    4) 430 gm

102. In which year was the per capita availability of tea minimum?
    1) 1996  
    2) 1994  
    3) 1991  
    4) None of these
103. In which year was there minimum percentage of export with respect to production?

104. In which year we had maximum quantity of tea for domestic consumption?

105. What approximately was the average quantity of tea available for domestic consumption during the period?
   1) 324.3 million kg
   2) 400 million kg
   3) 410.3 million kg
   4) 320.3 million kg

106. What was approximately the average population during the period?
   1) 625 million
   2) 624 million
   3) 600 million
   4) 757 million

Directions for question 107 to 114: Study the table given below and answer these questions.

**MAJOR INDICATORS OF INDIA'S FOREIGN TRADE**

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports Balance</th>
<th>Import GDP ratio %</th>
<th>Trade GDP ratio %</th>
<th>Exports</th>
<th>Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-90</td>
<td>16613</td>
<td>21219</td>
<td>-4606</td>
<td>6.1</td>
<td>7.7</td>
</tr>
<tr>
<td>1990-91</td>
<td>18145</td>
<td>24073</td>
<td>-5928</td>
<td>6.1</td>
<td>8.1</td>
</tr>
<tr>
<td>1991-92</td>
<td>17865</td>
<td>19411</td>
<td>-1546</td>
<td>7.1</td>
<td>7.8</td>
</tr>
<tr>
<td>1992-93</td>
<td>18537</td>
<td>21882</td>
<td>-3345</td>
<td>7.6</td>
<td>9.0</td>
</tr>
<tr>
<td>1993-94</td>
<td>22238</td>
<td>23306</td>
<td>-1068</td>
<td>8.0</td>
<td>8.3</td>
</tr>
<tr>
<td>1994-95</td>
<td>26331</td>
<td>28654</td>
<td>-2323</td>
<td>8.0</td>
<td>8.7</td>
</tr>
<tr>
<td>1995-96</td>
<td>31795</td>
<td>36675</td>
<td>-4880</td>
<td>8.7</td>
<td>10.1</td>
</tr>
<tr>
<td>1996-97</td>
<td>33470</td>
<td>39132</td>
<td>-5662</td>
<td>8.4</td>
<td>99</td>
</tr>
<tr>
<td>1997-98</td>
<td>35006</td>
<td>41485</td>
<td>-6479</td>
<td>8.3</td>
<td>9.9</td>
</tr>
<tr>
<td>1998-99</td>
<td>33659</td>
<td>41858</td>
<td>-8199</td>
<td>8.1</td>
<td>10.0</td>
</tr>
</tbody>
</table>

107. In which period, did we have the most adverse trade balance for India?
   1) 1996-97
   2) 1989-90
   3) 1998-99
   4) 1990-91

108. What was the average % growth rate of exports during the entire period?
   1) 6.5          2) 9.56          3) 5.06          4) 10.26

109. In which period was the trade balance the best?
   1) 1998-99
10. In which period the growth rate of exports was the highest?
   1) 1995-96
   2) 1993-94
   3) 1989-90
   4) None of these

11. During which period the Export/Import ratio was the highest?
   1) 1994-95
   2) 1993-94
   3) 1991-92
   4) 1995-96

12. What is the average growth rate of exports for the period 1992-93 to 1995-96?
   1) 15
   2) 15.75
   3) 14
   4) 17.88

13. What is the average Export/Import ratio for the period 1992-93 to 1998-99?
   1) 83.4
   2) 86.3
   3) 65.1
   4) 87.0

14. Using Exports GDP ratio for the period 1989-90, find the GDP for the same period.
   1) 272344
   2) 275571
   3) 273345
   4) 275572

Directions for question 115 to 120: Study the table given below carefully and answer these questions.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population to be covered (million)</th>
<th>Water requirement (mld)</th>
<th>Actual or Projected supplies (mld)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>3.30</td>
<td>722</td>
<td>545</td>
</tr>
<tr>
<td>1994</td>
<td>4.35</td>
<td>913</td>
<td>680</td>
</tr>
<tr>
<td>2001</td>
<td>6.23</td>
<td>1105</td>
<td>1090</td>
</tr>
<tr>
<td>2011</td>
<td>8.19</td>
<td>1862</td>
<td>1906</td>
</tr>
<tr>
<td>2021</td>
<td>10.15</td>
<td>2224</td>
<td>1906</td>
</tr>
</tbody>
</table>

mld: Million litres per day

15. What is the average growth rate per year of population to be covered from 2001 to 2011?
   1) 3.15%
   2) 2.86%
   3) 4%
   4) 2%

16. In which year was there maximum difference between water requirements and actual or projected supplies?
   1) 1994
   2) 2011
   3) 2021
   4) 1991
117. In which year the actual or projected supplies exceeded/exceeds the water requirements?
   1) 2011
   2) 1994
   3) 2021
   4) None of these

118. What approximately is the maximum per capita of actual or projected supplies as litres/day?
   1) 278.1
   2) 187.78
   3) 232.7
   4) 174.9

119. In which year, there was the least difference in per capita water requirements and the actual or
    projected supplies?
   1) 2001
   2) 2011
   3) 1991
   4) 1994

120. In which year, there was the lowest per capita of water in actual or projected supplies?
   1) 2021
   2) 2001
   3) 1994
   4) 1991

Section-IV
Intelligence and Critical Reasoning

Directions for question 121 to 130: Read the following information carefully to answer
these questions.

A sample poll of 200 votes revealed the following information concerning three candidates A, B
and C of a certain party who were running for three different offices.
28 in favour of both A and B.
98 in favour of A or B but not C.
42 in favour of B but not A or C.
122 in favour of B or C but not A.
64 in favour of C but not A or B.
14 in favour of A and C but not B.

121. How many voters were in favour of all the three candidates?
   1) 14
   2) 8
   3) 20
   4) 16

122. How many voters were in favour of A irrespective of B or C?
   1) 78
   2) 64
   3) 42
   4) 56

123. How many voters were in favour of B irrespective of A or C?
   1) 78
   2) 62
   3) 48
   4) 86

124. How many voters were in favour of C irrespective of A or B?
   1) 78
   2) 102
   3) 88
   4) 86

125. How many voters were in favour of A and B but not C?
   1) 8
   2) 20
   3) 14
   4) 16
126. How many voters were in favour of only one of the candidates?
   1) 58  2) 78  3) 106  4) 142

127. How many voters were in favour of A and C but not B?
   1) 22  2) 14  3) 16  4) 20

128. How many voters were in favour of C alone?
   1) 36  2) 42  3) 64  4) 38

129. How many voters were in favour of B and C but not A?
   1) 16  2) 14  3) 42  4) 64

130. How many voters were in favour of A and C but not B?
   1) 16  2) 14  3) 36  4) 42

131. What is the next letter in the following series? a, c, b, d, e?
   1) h  2) g  3) i  4) j

Directions for question 132 to 138: In these questions, find the missing number.

132. 54 30 112 42 ? 28
   1) 76  2) 66  3) 10  4) None of these

133. 3 ?
     6561 81
   1) 18  2) 27  3) 24  4) 9

134. 2 3 3 3
     169 5  2 4 6
   1) 240 2) 195 3) 84 4) None of these

135. 3 5 8 7
     4 6 4 6
     5 2 2 3
136. 6, 15, 36, 75, ?
   1) 231
   2) 138
   3) 214
   4) None of these

137. 5 : 7 :: ? : 28
   1) 20
   2) 14
   3) 56
   4) None of these

138. 15, 45, ?, 405
   1) 90
   2) 75
   3) 135
   4) 51

Directions for question 139 to 148:
In these questions, two statements are given followed by two conclusions I and II. You have to consider both the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions is/are definitely drawn from the given statements.
Answer 1 if only I follows
Answer 2 if only II follows
Answer 3 if neither I nor II follows
Answer 4 if both I and II follow

139. Statements:
When it rains, usually X does not go out.
X has gone out.
Conclusions:
I. It is not raining.
II. X has some urgent business to transact.
1) 2
2) 1
3) 3
4) 4

140. Statements:
In a Golf Club, all the members are not active players of the game but all of them are rich.
Mrs X is a member.
Conclusions:
I. She is a golfer.
II. She is rich.
1) 1
2) 3
3) 2
4) 4

141. Statements:
All employees of company A have identity cards.
Ram is an employee of company A.
Conclusions:
I. Ram has an identity card.
II. Ram is the General Manager of the Company.
   1) 2       2) 1       3) 4       4) 3

142. Statements:
    If there is shortage in the production of onions, the price of onions will go up.
    Price of onions has gone up.
    Conclusions:
    I. There is shortage in the production of onions.
    II. Onions were exported.
    1) 3       2) 2       3) 1       4) 4

143. Statements:
    If all players play to their full potential, we will win the match.
    We have won the match.
    Conclusions:
    I. All players played to their full potential.
    II. Some players did not play to their full potential.
    1) 2       2) 3       3) 1       4) 4

144. Statements:
    Some businessmen are rich.
    Soman is rich.
    Conclusions:
    I. Soman is a businessman.
    II. Soman has a big farm.
    1) 2       2) 3       3) 4       4) 1

145. Statements:
    All persons who own a house or a car should file Income Tax return.
    Shielo files her income tax return.
    Conclusions:
    I. Shielo owns a house or a car.
    II. Shielo neither owns a house nor a car.
    1) 2       2) 1       3) 3       4) 4

146. Statements:
    In order to be selected for the local cricket team, a person should be either a good batsman or bowler.
    Shyam is selected for the team.
    Conclusions:
    I. Shyam is a good batsman.
    II. Shyam is not a good bowler.
    1) 4       2) 3       3) 1       4) 2

147. Statements:
    Without rains the crops will not be good.
    The crops were good.
    Conclusions:
    I. There were rains.
    II. Crops were good due to good fertilizers.
148. Statements:
According to the evolution theory, man evolved from a monkey.
X is a monkey.
Conclusions:
I. X can become a man.
II. Man can become a monkey.
1) 1 2) 3 3) 2 4) 4

Directions for question 149 to 153: In these questions, select the odd one out.

149.

1) 3 2) 1 3) 2 4) 4

150.

1) 2 2) 1 3) 4 4) 3

151.

1) 2 2) 1 3) 3 4) 4

152.

1) 3 2) 2 3) 4 4) 1

153.

1) 3 2) 4 3) 2 4) 1

154. Four positions of a cube are shown below. Which symbol is opposite to the face having 'Δ'

Question. Figures

Answer Figures
Directions for question 155 to 158: Read the following information carefully and answer these questions.

In a certain coding system,
'816321' means "The brown dog frightened the cat",
'64851' means "The frightened cat ran away",
'7621' means "The cat was brown",
'341' means "The dog ran"

155. What is the code for 'the dog was frightened'?
   1) 8263  
   2) 8731  
   3) 5438  
   4) None of these

156. What is the code for 'frightened'?
   1) 2  
   2) 6  
   3) 3  
   4) 8

157. What is the code for 'away'?
   1) 5  
   2) 7  
   3) 6  
   4) 1

158. What is the code for 'brown'?
   1) 2  
   2) 4  
   3) 6  
   4) 8

159. In how many ways can 7 people be seated at a round table if 2 particular people must not sit next to each other?
   1) 5040  
   2) 240  
   3) 480  
   4) 720

160. In a certain coding system ETTPI stands for APPLE. What is the code for 'DELHI'?
   1) COMNP  
   2) HIPLM  
   3) PMULM  
   4) COPLM

Section-V
Indian and Global Environment

161. William M Daley who was part of the US President's delegation to India is the
   1) Secretary of State for Commerce  
   2) Chairman of the Committee on Foreign Affairs  
   3) Asst. Secretary of State for Information Technology  
   4) Leader of the House of Representatives

162. Where was the last round of talks for the WTO held in November-December 1999?
   1) Sydney
2) London  
3) Washington  
4) Seattle  

163. Who played the role of Saket Ram in the controversial film *Hey Ram*?  
1) Shah Rukh Khan  
2) Kamal Hassan  
3) Naseeruddin Shah  
4) Om Puri  

164. The present Pope went on a historic tour of which region in March 2000?  
1) Russia  
2) Greece  
3) Israel and Jordan  
4) Turkey  

165. Nokia is going to begin shipping 1 million WAP phones every week which will allow the user to browse the Internet through the mobile phone. What does WAP stand for?  
1) Windows Applications Protocol  
2) Wireless Applications Protocol  
3) Windows Alpha Project  
4) Wireless Alpha Project  

166. 15th World Chess Championship was won by  
1) Viswanathan Anand  
2) Anatoly Karpov  
3) Karpam Malleswari  
4) Leander Paes  

167. Which city in the world has the distinction of hosting the most cricket matches?  
1) London (Lords)  
2) Melbourne  
3) Calcutta  
4) Sharjah  

168. Who was the last President of the US to serve for two terms before Mr Bill Clinton?  
1) John F Kennedy  
2) Ronald Reagan  
3) George Bush  
4) Jimmy Carter  

169. We have all heard of a venture capitalist in the IT industry. Who or what is an angel investor?  
1) Someone who puts money in the beginning of the project and usually does not expect returns on the investment.  
2) Someone who puts money in an internet company that is running into losses.
3) Someone who gives only technical consultancy for the project.
4) None of the above

170. Who is the Supreme Commander of the Indian Armed Forces?
   1) Prime Minister
   2) Defence Minister
   3) President
   4) Chief of the Army Staff

171. Which company has been listed as the highest spender on advertisements?
   1) Reliance
   2) Hindustan Lever
   3) Dabur India
   4) Nestle India

172. Salman Khan and Sunil Shetty have been recruited as part of which campaign in the year 2000?
   1) Coke
   2) Pepsi
   3) Thumps Up
   4) Kawasaki Bajaj

173. What is the present level of Indo-US trade?
   1) $ 5-6 billion
   2) $ 8-9 billion
   3) $ 11-12 billion
   4) $ 20 billion

174. Bill Clinton is the fourth US President to visit India. Who was the first US President to visit India?
   1) D Eisenhower
   2) John F Kennedy
   3) Richard Nixon
   4) Lyndon B Johnson

175. Who among the following holds the Telecom Ministry in the present NDA government?
   1) Nitish Kumar
   2) Mamta Bannerjee
   3) Ram Vilas Paswan
   4) None of the above

176. Who is the Chief Election Commissioner of India at present?
   1) N Vittal
   2) MS Gill
   3) Arun Jaitley
   4) TN Seshan
177. Bill Gates recently stepped down as the CEO of Microsoft but announced that he will take a new post to “focus on technologies of the future”. What is this post?
   1) Chairman and Chief Software Architect
   2) Managing Director
   3) President
   4) All of the above

178. _______ is not a member of ASEAN.
   1) Pakistan
   2) Singapore
   3) Malaysia
   4) Indonesia

179. Which famous war hero said: "You are remembered for the rules you break"?
   1) Douglas MacArthur
   2) Napoleon
   3) Rommel
   4) Lawrence of Arabia

180. Who is associated with Narmada Bachao Andolan?
   1) AB Vajpayee
   2) Medha Patkar
   3) Mamata Bannerjee
   4) Sunder Lal Bahuguna

181. Name the actress who played the leading role in the film Elizabeth directed by Shekhar Kapoor?
   1) Cate Blanchet
   2) Demi Moore
   3) Nandita Das
   4) Meryl Streep

182. The Romantics is the first fiction work of which writer?
   1) Raj Kamal Jha
   2) Salman Rushdie
   3) Tarun Tejpal
   4) Pankaj Mishra

183. The Upper House of Parliament is known as
   1) Parliament House
   2) Rashtrapati Bhawan
   3) Rajya Sabha
   4) Lok Sabha

184. The US attacked terrorists training camps in Afghanistan belonging to Osama Bin Laden. To which country does he originally belong to?
1) Saudi Arabia
2) Iraq
3) Iran
4) Yemen

185. Which country did Saddam Hussein invade that sparked off the Gulf War?
   1) Jordan
   2) Iran
   3) Saudi Arabia
   4) Kuwait

186. The satellite-based personal communications company Iridium, which had to shut down its services, is a subsidiary company of which US giant?
   1) General Electric
   2) US Robotics
   3) Motorola
   4) AT & T

187. Miss World 2000 title has been won by
   1) Aishwarya Rai
   2) Sushmita Sen
   3) Priyanka Chopra
   4) Diya Mirza

188. In radio, what does SW stand for?
   1) Short Wave
   2) Slim Wave
   3) Sholowksy Wave
   4) None of the above

189. Shekhar Kapoor is working on a film project with which of the following famous composers?
   1) John Williams
   2) Andrew Lloyd Webber
   3) Elton John
   4) Paul McCartney

190. Which of the following did India not want to be part of the last WTO talks?
   1) Labour standards
   2) Environmental standards
   3) Textile quotas
   4) Labour and Environmental Standards

191. Which multi-purpose vehicle was launched by Toyota this year in India?
   1) Qualis
   2) Land Cruiser
3) Wagon R
4) Land Rover

192. Which artist's autobiography is titled "Autobiography of a Genius"?
   1) Winston Churchill
   2) ZA Bhutto
   3) Otto Von Bismarck
   4) None of these

193. With which airlines does Virgin Atlantic have a strategic tie-up?
   1) United Airlines
   2) British Airways
   3) Singapore Airlines
   4) None of these

194. Which of the following cities was not visited by President Mr Bill Clinton during his trip to India?
   1) Bangalore
   2) Mumbai
   3) Hyderabad
   4) Agra

195. KS Sudarshan took over as the head of which organisation recently?
   1) Vishwa Hindu Parishad
   2) Rashtriya Swayamsewak Sangh
   3) Swadeshi Jagran Manch
   4) Bharatiya Mazdoor Sangh

196. In which city was the film Water being shot before it was halted due to protests?
   1) Delhi
   2) Allahabad
   3) Kanpur
   4) Varanasi

197. Who said; "I do not fear computers, I fear the lack of them."
   1) Ray Bradbury
   2) Isaac Newton
   3) Thomas Edison
   4) Isaac Asimov

198. Which is the newly-formed ministry of the Government of India?
   1) Ministry of IT
   2) Ministry of I & B
   3) Ministry of S & T
   4) Ministry of Environment
199. When was the last time that India won the Gold medal in Hockey in the Olympics?
1) 1992        2) 1980        3) 1964        4) 1972

200. Recently Bill Gates became the first man to cross the 100 billion dollars mark. According to economists this means that only ______ nations have an economic output higher than that of Bill Gates.
1) More than 50
2) Less than 42
3) 60
4) 80
Solved Management Aptitude Test (MAT) 2001 Question Paper

ANSWERS KEY

1) 1  2) 4  3) 4  4) 1  5) 4  6) 3  7) 4  8) 3  9) 2  10) 1
11) 2  12) 4  13) 2  14) 1  15) 1  16) 3  17) 1  18) 4  19) 4  20) 3
21) 2  22) 3  23) 3  24) 3  25) 4  26) 1  27) 3  28) 1  29) 2  30) 3
31) 2  32) 2  33) 1  34) 3  35) 3  36) 3  37) 2  38) 1  39) 4  40) 2
41) 2  42) 3  43) 2  44) 1  45) 2  46) 3  47) 3  48) 2  49) 1  50) 2
51) 3  52) 1  53) 3  54) 1  55) 4  56) 2  57) 1  58) 3  59) 4  60) 2
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71) 1  72) 3  73) 3  74) 3  75) 2  76) 1  77) 3  78) 1  79) 3  80) 1
81) 1  82) 2  83) 2  84) 2  85) 3  86) 1  87) 3  88) 3  89) 4  90) 3
91) 2  92) 2  93) 3  94) 2  95) 2  96) 3  97) 3  98) 2  99) 4  100) 2
101) 4  102) 3  103) 1  104) 3  105) 1  106) 4  107) 3  108) 4  109) 4  110) 1
111) 2  112) 4  113) 2  114) 1  115) 1  116) 3  117) 1  118) 3  119) 2  120) 3
121) 2  122) 1  123) 4  124) 2  125) 2  126) 4  127) 2  128) 3  129) 1  130) 2
131) 2  132) 2  133) 4  134) 2  135) 4  136) 2  137) 1  138) 3  139) 3  140) 3
141) 2  142) 3  143) 3  144) 2  145) 3  146) 2  147) 1  148) 2  149) 1  150) 4
151) 3  152) 2  153) 1  154) 3  155) 2  156) 4  157) 1  158) 1  159) 3  160) 2
161) 1  162) 4  163) 2  164) 3  165) 2  166) 1  167) 1  168) 2  169) 1  170) 3
171) 2  172) 3  173) 3  174) 1  175) 3  176) 2  177) 1  178) 1  179) 1  180) 2
181) 1  182) 4  183) 3  184) 1  185) 4  186) 3  187) 3  188) 1  189) 2  190) 4
191) 1  192) 4  193) 4  194) 1  195) 2  196) 4  197) 4  198) 1  199) 2  200) 2