

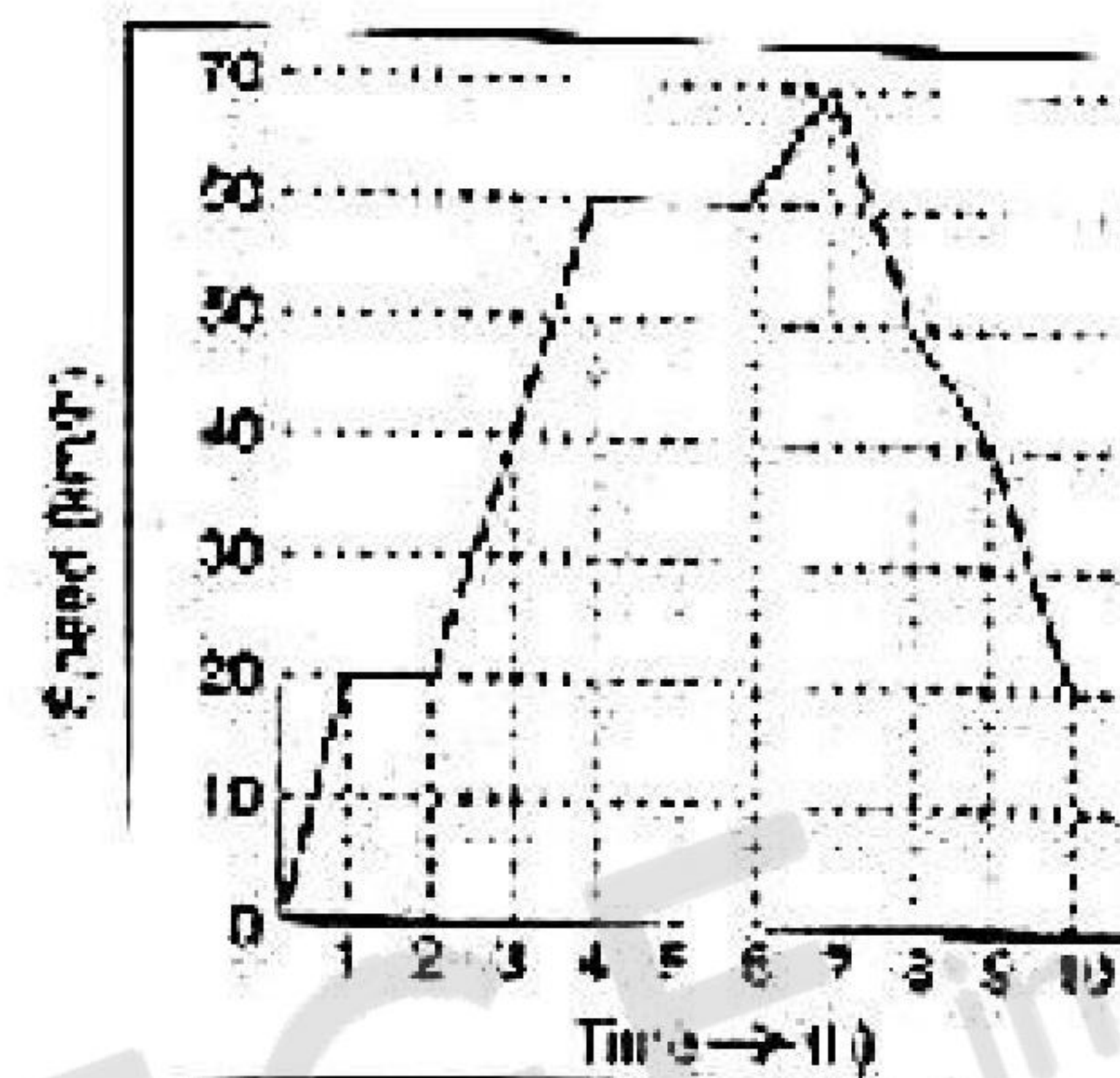
MANAGEMENT APTITUDE TEST 2010

Directions (Qs. 1 to 5) : Read the following information and then answer the questions that follow :

Group Captain Malhotra is choosing the last pair of his crew for the spaceship COSMOS, with which he plans to land on the moon. He needs 4 more crew members of whom at least two must be pilots, the others being engineers. The pilots are to be selected from Dalbir, Eric and Farid and the engineers from Lal, Monty, Naveen and Paul. Eric will not crew with Lal and Dalbir will not crew with Naveen.

- If Naveen is chosen, which of the following must be other members of the crew ?
 (a) Farid, Lal and Monty (b) Dalbir, Eric and Monty
 (c) Eric, Farid and Monty (d) Eric, Farid and Paul
- If Paul is chosen, which candidates will not be chosen to be on the crew ?
 (a) Dalbir, Eric and Monty
 (b) Dalbir, Eric and Farid
 (c) Dalbir, Farid and Lal
 (d) Eric, Farid and Lal
- Given the above statements about the relationships among the potential crew members, which of the following must be true ?
 A : If Dalbir is rejected, then Monty must be chosen.
 B : If Dalbir is rejected, then Farid must be chosen.
 C : If Dalbir is chosen, then Paul must also be chosen.
 (a) B only (b) C only
 (c) A and B only (d) A and C only
- If Lal is chosen as an engineer, which of the following could be the other members of the crew ?
 A : Dalbir, Farid and Monty
 B : Dalbir, Farid and Naveen
 C : Dalbir, Farid and Paul
 (a) A only (b) B only
 (c) C only (d) A and C only
- Which of the following statements must be true ?
 A : If Group Captain Malhotra chooses Lal, then Farid also must be chosen.
 B : If Group Captain Malhotra chooses Monty, then Naveen must also be chosen.
 C : Lal and Naveen never crew together.
 (a) A only
 (b) A and B only
 (c) A and C only
 (d) B and C only

Directions (Qs. 6 to 9) : Study the following graph carefully and then answer the questions that follow :



- The average speed represented above is :
 (a) 20 km/h (b) 37 km/h
 (c) 45 km/h (d) 49 km/h
- Considering two-hour slots from the beginning, the second highest distance covered in a two-hour period was between :
 (a) 0-2 h (b) 2-4 h
 (c) 4-6 h (d) 6-8 h
- The highest rate of acceleration was :
 (a) 25 km/h² (b) 20 km/h²
 (c) 15 km/h² (d) 10 km/h²
- If the rate of deceleration of the 8th hour had continued, the speed would have become zero at :
 (a) 9 h 10 min (b) 10 h 30 min
 (c) 11 h 10 min (d) none of these

Directions (Qs. 10 to 13) : Study the information given carefully and then answer the questions that follow :

In a 5 year Management Course, students studying in 2nd year are asked to select four optional subjects from the seven given subjects. There are ten students whose Roll Numbers are from 1 to 10. They have selected four optional subjects each. Their subjects selected are indicated by 'Y'.

Courses	Roll Numbers									
	1	2	3	4	5	6	7	8	9	10
TA	Y		Y	Y		Y		Y	Y	Y
MBCA		Y	Y		Y	Y		Y		
YCA			Y			Y	Y		Y	Y
DMBC	Y	Y		Y	Y		Y	Y		
XA		Y					Y		Y	Y
PG	Y		Y	Y	Y		Y	Y		
PM	Y	Y		Y	Y	Y			Y	Y

10. Which of the following triple courses have maximum number of students in common ?
 (a) TA, MBCA, YCA
 (b) DMBC, TA, PG
 (c) YCA, PM, XA
 (d) DMBC, PG, XA
11. Which Roll Numbers have the maximum common number of optional subjects ?
 (a) 1 and 8 (b) 3 and 6
 (c) 9 and 10 (d) 2 and 5
12. Which optional subject was chosen by the maximum number of students ?
 (a) XA (b) TA
 (c) MBCA (d) DMBC
13. Which Roll Numbers have the same optional subjects ?
 (a) 3 and 6 (b) 1 and 3
 (c) 6 and 8 (d) 9 and 10
- Directions (Qs. 14 to 17) :** Each of the questions given below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question in each case. Read both the statements and give answer as :
- (a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question
 (b) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
 (c) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
 (d) If the data even in both statements I and II together are not sufficient to answer the question.
14. Is K^2 an integer ?
 I. K is a negative whole number.
 II. $4K^2$ is an integer.
15. Is $x^2 + y^2 < 1$?
 I. $(y - x)(x + y) = 40\%$ of $60 - 120\%$ of 20.
 II. $x < y$.
16. By selling a product for Rs 100, how much profit was earned ?
 I. 20% profit would have been earned if it had been sold for Rs 90.
 II. The profit was one-third of the purchase price.
17. What is the rate of CI on a sum of money ?
 I. The difference between CI and SI at the same rate of interest for 2 yrs is Rs 43.20 and SI at the end of 5 yrs is Rs 3600.
 II. The difference between CI and SI at the same rate of interest on Rs 12000 for 3 yrs is Rs 132.19.
- Directions (Qs. 18 to 22) :** The following questions are accompanied by three statements (A), (B) and (C). You have to determine which statement(s) is/are sufficient /necessary to answer the questions.
18. How much minimum marks are required to pass an examination?

- A. Student A secured 38% marks in the examination and failed by 8 marks. Student B secured 42% marks in the same examination and got 12 more than the minimum pass marks.
 B. Student A secured 35% of the total marks in the examination and failed by 23 marks. If he had secured 25 more marks, his percentage of marks would have been 40%.
 C. A student will be declared passed if he secures 39.60% of the total marks.
 (a) Any two of them (b) Only A
 (c) C and either A or B (d) Either A or B only
19. What will be the share of R in the profit earned by V, R and A together ?
 A. They together invested an amount of Rs 54000 for a period of one year.
 B. R's investment was 25% less than V's and 50% more than A's.
 C. The profit of V is Rs 4000 more than that of A.
 (a) Only A and B together (b) B and either A or C only
 (c) Only B (d) Only B and C together
20. What was the profit earned on the cost price by Mahesh by selling an article ?
 A. He got 15% concession on the labelled price in buying that article.
 B. He sold it for Rs 3060.
 C. He earned a profit of 2% on the labelled price.
 (a) Only A and B together are required
 (b) Only B and C together are required
 (c) Only either A or C and B together are required
 (d) All A, B and C together are required
21. 15 men and 20 women work together for 5 days and then 5 men and 8 women leave the group. In how many days will the remaining work be finished by the remaining people ?
 A. 10 men and 15 women together can complete the work in $17\frac{1}{2}$ days.
 B. The work done by 1 man is equal to the work done by 2 women.
 C. 20 men alone can do the entire work in 15 days.
 (a) Any one of them (b) Either A or C
 (c) Only B (d) Any two of them
22. What is the cost of flooring a rectangular hall ?
 A. The length and the breadth of the hall are in the ratio of 3 : 2.
 B. The length of the hall is 48 m and the cost of flooring is Rs 850 per square metre.
 C. The perimeter of the hall is 160 m and the cost of flooring is Rs 850 per square metre.
 (a) Only A and B (b) Only A and C
 (c) Only C (d) Any two of the three
- Directions (Qs. 23 to 25) :** A word arrangement machine, when given a particular input, rearranges it following a particular rule. The following is the illustration of the input and the steps of arrangement :
- Input : Put pocket hand watch he for them.
 Step I : Put for he watch hand pocket them.

- Step II : Put he for watch pocket hand them.
 Step III : Put hand pocket watch for he them.
 Step IV : Put pocket hand watch for he them.
 And so on goes the machine. Study the logic and answer the questions that follow :
23. If step III of a given input be 'fly sky birds my su fur say', what is the seventh step of the input ?
 (a) fly sky birds my su fur say
 (b) fly birds sky my fur su say
 (c) fly fur su my birds sky say
 (d) fly su fur my sky birds say
24. If step VII of an input is 'slow ran dhurwa pat hak dig vi', what is step V of that input ?
 (a) slow dig hak pat dhurwa ran vi
 (b) slow hak dig pat ran dhurwa vi
 (c) slow dhurwa ran pat dig hak vi
 (d) slow ran dhurwa pat hak dig vi
25. Given the following :
 Input : Ana dhir raj ran san rah aji
 What step will be the following arrangement ?
 Arrangement : Ana san rah ran dhir raj aji
 (a) IV (b) V (c) VI (d) VIII
- Directions (Qs. 26 to 30) : Read the information given below and answer the questions that follow :
- (i) There is a group of seven persons A, B, C, D, E, F and G.
 (ii) There are four males, three females, two married couples and three unmarried persons in the group.
 (iii) The seven persons are seated in a row on the bench.
 (iv) Their professions are : engineer, teacher, doctor, psychologist, businessman, architect and student.
 (v) B is not married and another person, the psychologist, is the most intelligent.
 (vi) The engineer is married to the teacher, who is the least intelligent of the group.
 (vii) D is an architect. He is sitting on the leftmost corner.
 (viii) The student is sitting on the rightmost corner of the bench.
 (ix) The doctor is married to C. C is the second most intelligent of the group followed by her husband.
 (x) The least intelligent of the group is sitting on the immediate right of D, followed by the most intelligent.
 (xi) There are as many more intelligent persons than the engineer as there are less intelligent.
 (xii) On the bench, followed by D, there are three females sitting in succession.
 (xiii) The psychologist is a female.
 (xiv) The student is more intelligent than the architect, who is more intelligent than only one person, F.
 (xv) Neither A nor G is a female.
26. Who is sitting on the immediate right of D ?
 (a) F (b) E
 (c) C (d) Can't say
27. Which two are sitting together ?
 (a) D and E
 (b) E and A
 (c) Teacher and businessman
 (d) Engineer and doctor
28. The engineer is not more intelligent than :
 (a) student (b) architect
 (c) teacher (d) businessman
29. Which of these cannot be a married couple ?
 (a) A-F (b) A-C
 (c) G-F (d) None of these
30. Which of these represents the correct order of intelligence (in the decreasing sequence) ?
 (a) EBF (b) CDF
 (c) ECB (d) None of these
- Directions (Qs. 31 to 33) : Complete the following series :
31. AZ, GT, MN, ?, YB :
 (a) KF (b) RX
 (c) SH (d) TS
32. J2Z, K4X, I7V, ?, H16R, M22P :
 (a) I11T (b) L11S
 (c) L12T (d) L11T
33. gfe — ig — eii — fei — gf — ii :
 (a) eifgi (b) figie
 (c) ifgie (d) ifige
34. If ACELDNRA stands for CALENDAR, what does LEGIBIEL stands for ?
 (a) LIEGIBLE (b) ELIGIBLE
 (c) BIGEELIC (d) None of these
35. If 18514 stands for AHEAD, what does 31385 stands for ?
 (a) CATCH (b) CASSET
 (c) CONQUER (d) CACHE
- Directions (Qs. 36 to 41) : Attempt these questions independently of each other.
36. X told Y, "Though I am the son of your father, you are not my brother". How is X related to Y ?
 (a) Sister (b) Son
 (c) Daughter (d) None of these
37. Standing on a rock, Ravi said that Madurai was more than 3 km but less than 8 km from there. Prabhu said that it was more than 6 km but less than 10 km from there. If both of them are correct, how far is Madurai from the rock ?
 (a) 8 km (b) 6 km
 (c) 7 km (d) Cannot be determined
38. Three of the following four are alike in a certain way and so form a group. Which one does not belongs to that group ?
 (a) — (b) +
 (c) % (d) =
39. In a row of children, Bhushan is seventh from the left and Motilal is fourth from the right. When Bhushan and Motilal exchange positions, Bhushan will be fifteenth from the left. What will be Motilal's position from the right ?
 (a) Eighth (b) Fourth
 (c) Eleventh (d) Twelfth
40. A clock gaining 2 min every hour was synchronised at midnight with a clock losing 1 min every hour. How many minutes behind will its minute hand be at eleven the following morning ?
 (a) 23 (b) 27
 (c) 22 (d) None of these

41. Keshav knows that Sudha's marks are more than 3 but less than 8 in a unit test. Sonia knows that these are more than 6 but less than 10. If both of them are correct, which of the following statements about Sudha's marks is definitely true?

(a) It has only one value
(b) It has any of three values
(c) It has either of two values
(d) It has any of four values

Directions (Qs. 42 to 45) : Each of the following questions is followed by three statements. You have to study the question and all the three statements given and decide whether any information provided in the statement(s) is redundant and can be dispensed with while answering the questions.

42. A 25 m long wire is cut into 3 pieces. How long is the longest piece?
- A. Two pieces are each 1 m shorter than the longest piece.
B. Two pieces of the wire are of the same length.
C. The longest piece of the wire is 12.5% more than the smallest piece.
- (a) Only A
(b) Either A alone or B and C together
(c) Only B and C together
(d) B and either A or C

43. Is the average of the largest and the smallest of four given numbers greater than the average of the four numbers?
- A. The difference between the largest and the second largest number is less than the difference between the second largest and the second smallest number.
B. The difference between the largest and the second largest number is greater than the difference between the second smallest and the smallest numbers.
C. The difference between the largest and the second smallest numbers is greater than the difference between the second largest and the smallest numbers.
- (a) Only A
(b) Either B or C
(c) A and either B or C
(d) Any two of them

44. Rajdhani Express leaves Delhi at 4 PM for Mumbai. At what time will it reach Mumbai?
- A. It maintains the average speed of 110 km/h.
B. It has four stoppages of 10 min each between Delhi and Mumbai.
C. It covers 250 km before each stoppage.
- (a) Only B
(b) Any two of the three
(c) Any one of the three
(d) None of these

45. Find the area of an isosceles triangle.
- A. Perimeter of the triangle is 64 cm.
B. Base of the triangle is 16 cm.
C. Height of the triangle is $16\sqrt{2}$ cm.
- (a) Any of them
(b) Any two of them
(c) Either B or C only
(d) Only A

Directions (Qs. 46 to 50) : Read the passage and the information in the two tables given below and then answer the questions that follow :

A rating company rates the performance of three energy biscuit companies. The points are allotted according to

their sale. The Point Index (PI) of each of the companies = The number of lakh units sold during the month $\times$ points allotted.

Table-1

The number of lakh units sold = x	Points allotted
$x \leq 5$	3
$5 < x \leq 8$	4
$8 < x \leq 11$	5
$x > 11$	6

The following table shows the number of lakh units sold of each of the brands Moonfeast, Warle G and Enivita from Jan 06 to June 06 :

Table-II

Name of month	Moonfeast	Warle G	Enivita	Rank of months according to PI
Jan 06	7	4	-	4
Feb 06	-	13	-	1
Mar 06	-	-	-	5
April 06	-	-	-	6
May 06	-	-	-	2
June 06	-	-	10	3

Note :

- (1) The number of lakh units sold by all the three companies in each of the months is identical.
- (2) The sum of the number of lakh units sold by each of the companies in all the six months together is identical.
- (3) The number of lakh units sold by any of the companies in any one of the months is at least 1.
- (4) The number of lakh units sold by exactly two companies in each of the months Feb 06, March 06 and April 06 is identical.
- (5) The Point Index of Jan 06 and May 06 is 26 and 17 less than Feb 06. Also, the PI in Jan 06 is one more than March 06.
- (6) The number of lakh units sold by Moonfeast in March 06 and April 06 together is equal to that in May 06.
- (7) The sum of PI in any month is not greater than 100.
- (8) The least possible Point Index (PI) is in April 06 for the sum of lakh units sold by all three companies.

46. Find the number of lakh units sold by Enivita in March 06.
- (a) 5
(b) 6
(c) 4
(d) 7
47. What was the PI of all three companies in April 06?
- (a) 59
(b) 60
(c) 61
(d) 58
48. The number of lakh units sold by Moonfeast in all the six months together L , is :
- (a) 34
(b) 32
(c) 36
(d) 38
49. What number of lakh units did Enivita sell in May 06?
- (a) 7
(b) 4
(c) 5
(d) 8

50. The PI of Warle G in all the six months together was :
 (a) 139 (b) 153
 (c) 138 (d) 148

Directions (Qs. 51 to 54) : Answer the questions that follow on the basis of the information given below. The rate of taxation has the following slabs in India.

Taxable Income (Rs)	Tax Rate
0-50,000	Exempt
50,000-60,000	10%
60,000-1,50,000	20%
1,50,000 +	30%

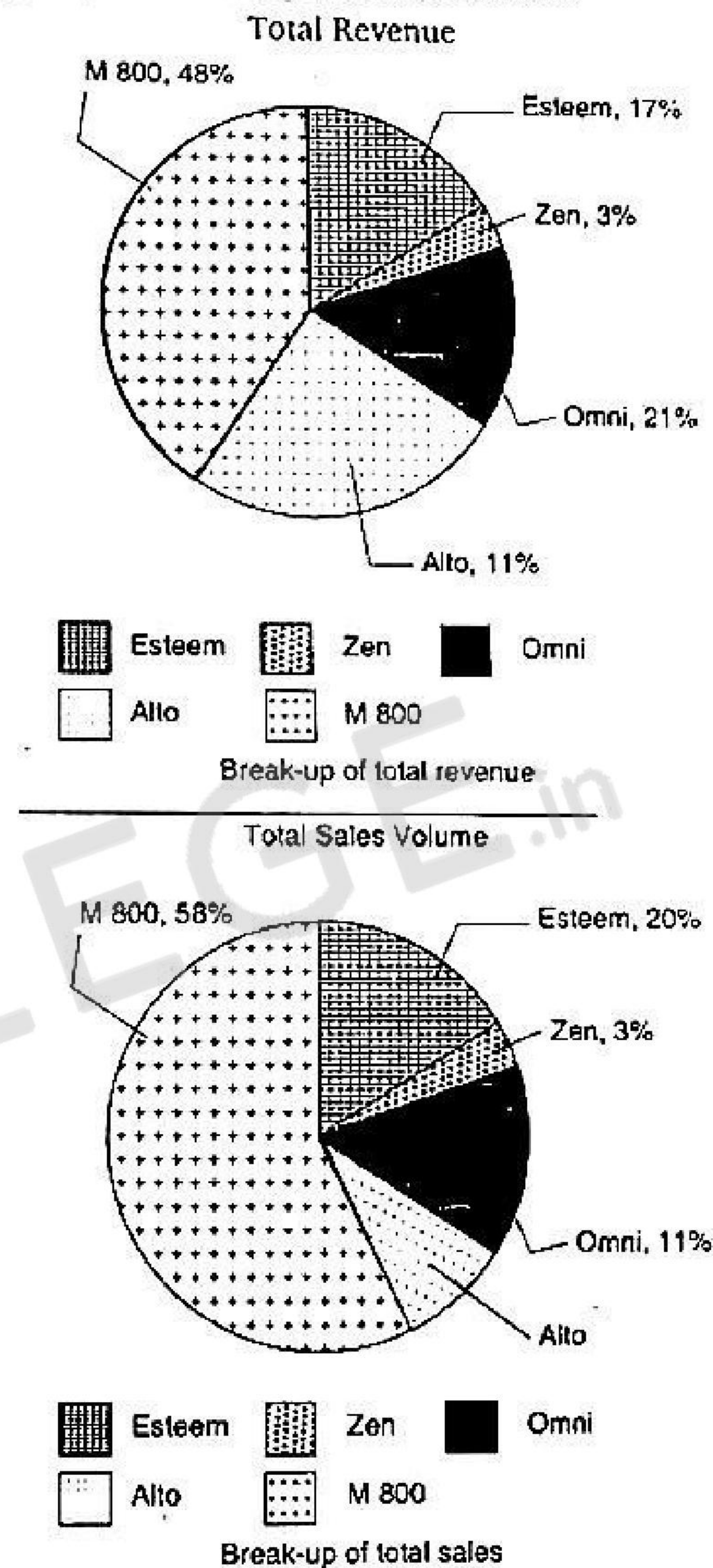
For salaried employees having salaries below Rs 1,50,000 p.a., the standard deduction of Rs 30,000 is available which is reduced from the total income. Besides, a rebate is available on investments in various saving schemes like Provident Fund, Infrastructure Bonds, Post Office Savings, etc. The rebate is calculated at 20% of the total investment in these savings instruments. Thus, if a person has invested Rs 10,000 in some savings instruments, he gets Rs 2,000 rebate on his net tax liability.

However, if the salary increases above Rs 1,50,000 pa., the standard deduction is reduced to Rs 25,000 and the rebate on investments is calculated at the rate of 15% of the total investment. Thus, a person saving Rs 20,000 will get a rebate of Rs 3,000 on his liability. Besides, a tax for charge of 10% is added on the total tax liability for all the tax payers. Also, working women have a further rebate of Rs 5,000 available to them on their total tax liability.

51. What will be the total tax liability of Mr. Rajiv Srivastava, who has a salary of Rs 1,50,000 p a (Assuming he saved Rs 40,000 in the year) ?
 (a) Rs 5,000 (b) Rs 5,500
 (c) Rs 1,000 (d) Data insufficient
52. For the question above, if Mr. Srivastava's salary increases by Rs 5,000 p a, what will be the change in his net income after tax (Assuming that he again saves Rs 40,000 in the year) ?
 (a) Increase of Rs 1,000 (b) Decrease of Rs 800
 (c) Increase of Rs 600 (d) Increase of Rs 5,000
53. Mrs. Shruti Srivastava, who works in the same firm, earns a salary of Rs 1,50,000 p a. How much must she save to pay no tax for the year ?
 (a) Rs 41,000 (b) Rs 40,000
 (c) Rs 30,000 (d) Rs 60,000
54. Prakash Purti has a salaried income of Rs 1,44,000. Besides he has earned Rs 35,000 as consultancy income. He has saved Rs 70,000 for the year in tax savings instruments. How much tax will he have to pay ?
 (a) Rs 18,000 (b) Rs 14,800
 (c) Rs 4,800 (d) None of these

Directions (Qs. 55 to 59) : The pie charts below show the break-up of the total revenue and total sales volume for a company, for the year ended 2003.

Total revenue = Rs 11,39,200 million and total sales volume = 653610 unit. Based on the data provided, in both the figures, answer the questions that follow.



55. What is the net revenue per Esteem sold, approximately ?
 (a) Rs 14,81,000 (b) Rs 13,48,000
 (c) Rs 15,32,000 (d) Rs 13,26,000
56. The highest net revenue per vehicle comes from :
 (a) M 800 (b) Omni
 (c) Esteem (d) Zen
57. If volume of sales of Omni was increased by 25% and this sales increase 'was' entirely at the cost of M 800, then what is the percentage decrease in M 800 volume sales ?
 (a) 1.3% (b) 2.4%
 (c) 4.3% (d) 4.75%
58. If the net revenue from Alto was to be excluded, what percent of the revenue would Zen form ?
 (a) 3.27% (b) 3.17%
 (c) 3.37% (d) 3.47%

59. Which of the following is true ?
 (i) The sum of the revenue generated by Zen and Omni is lesser than twice that of Alto.
 (ii) If the revenue of Esteem and Alto be interchanged, Alto's revenue per unit would be more than that for Zen.
 (iii) The revenue per unit of Esteem is greater than that for M 800.
 (a) (i) only (b) (ii) only
 (c) (iii) only (d) Both (ii) and (iii)
60. Four boys and three girls stand in queue for an interview. The probability that they will stand in alternate positions is :
 (a) $1/34$ (b) $1/35$
 (c) $1/17$ (d) $1/68$
61. A tower is 61.25 m high. A rigid body is dropped from its top and at the same instant another body is thrown upwards from the bottom of the tower with such a velocity that they meet in the middle of the tower. The velocity of projection of the second body is :
 (a) 20 m/s (b) 25 m/s
 (c) 24.5 m/s (d) none of these
62. A man carries a hammer on his shoulder and holds it at the other end of its light handle in his hand. If he changes the point of support of the handle at the shoulder and if x is the distance between his hand and the point of support, then the pressure on his shoulder is proportional to :
 (a) x (b) x^2
 (c) $1/x$ (d) $1/x^2$
63. Two trains are 2 km apart and their lengths are 200 m and 300 m. They are approaching towards each other with a speed of 20 m/s and 30 m/s, respectively. After how much time will they cross each other ?
 (a) 50 s (b) 100 s
 (c) $25/3$ s (d) 150 s
64. A and B play a game where each is asked to select a number from 1 to 5. If the two numbers match, both of them win a prize. The probability that they will not win a prize in a single trial is :
 (a) $1/25$ (b) $24/25$
 (c) $2/25$ (d) none of these
65. Four different integers form an increasing AP. If one of these numbers is equal to the sum of the squares of the other three numbers, then the numbers are :
 (a) -2, -1, 0, 1 (b) 0, 1, 2, 3
 (c) -1, 0, 1, 2 (d) none of these
66. A man arranges to pay off a debt of Rs 3,600 by 40 annual instalments which are in AP. When 30 of the instalments are paid he dies leaving one-third of the debt unpaid. The value of the 8th instalment is :
 (a) Rs 35 (b) Rs 50
 (c) Rs 65 (d) none of these
67. A family consists of a grandfather, 5 sons and daughters and 8 grandchildren. They are to be seated in a row for dinner. The grandchildren wish to occupy the 4 seats at each end and the grandfather refuses to have a grandchild on either side of him. The number of ways in which the family can be made to sit is :
 (a) 11360 (b) 11520
 (c) 21530 (d) none of these
68. A father with 8 children takes 3 children at a time to the zoological garden, as often as he can without taking the same 3 children together more than once. Then :
 (a) number of times he will go to the zoological garden is 56
 (b) number of times each child will go to the zoological garden is 21
 (c) number of times a particular child will not go to the zoological garden is 35
 (d) all of the above
69. Consider the following statements :
 A : Mode can be computed from histogram.
 B : Median is not independent of change of scale.
 C : Variance is independent of both the change of origin and scale.
 Which of these is/are correct ?
 (a) Only A and B (b) Only A
 (c) Only A (d) A, B and C
70. A uniform one metre long rod AB of weight 17 kg is suspended horizontally from fixed supports by two vertical strings attached to points C and D on the rod at distances of 12 cm and 16 cm from A and B respectively. The strings at C and D can support weights of 10 kg and 9 kg respectively without breaking. Then the position where a weight of 2 kg can be attached to the rod without breaking either of the strings is :
 (a) 10 cm from A (b) 12 cm from A
 (c) 13 cm from A (d) none of these
71. A car travels first half distance between two places with a speed of 40 km/h and the rest of the half distance with a speed of 60 km/h. The average speed of the car is :
 (a) 48 km/h (b) 37 km/h
 (c) 44 km/h (d) none of these
72. A juggler keeps three balls going with one hand, so that at any instant, two are in the air and one in hand. If each ball rises to a height of x metres, then each ball stays in the hand for :
 (a) $0.45\sqrt{x}$ s (b) $0.33\sqrt{x}$ s
 (c) $0.24\sqrt{x}$ s (d) none of these
73. A jet plane is rising vertically with a velocity of 10 m/s. It has reached a certain height when the pilot drops a coin, which takes 4 s to hit the ground. Assuming that there is no resistance to the motion of the coin, the height of the plane and the velocity of the coin on impact with the ground are :
 (a) 38.4 m, 29.2 m/s (b) 38.4 m, 28.7 m/s
 (c) 26.5 m, 13.5 m/s (d) none of these
74. In a company, there are 75% skilled workers and remaining ones are unskilled. 80% of skilled workers and 20% of unskilled workers are permanent. If number of temporary workers is 126, then what is the number of total workers ?
 (a) 480 (b) 510
 (c) 360 (d) 377

75. A shopkeeper sells an article at $12\frac{1}{2}\%$ loss. If he sells it for Rs 92.50 more, then he gains 6%. What is the cost price of the article ?
 (a) Rs 510 (b) Rs 500
 (c) Rs 575 (d) Rs 600
76. Two taps can fill a tank in 15 and 12 min, respectively. A third tap can empty it in 20 min. If all the taps are opened at the same time, then in how much time will the tank be filled ?
 (a) $8\frac{1}{2}$ min (b) 10 min
 (c) $11\frac{1}{3}$ min (d) 14 min
77. 4 men and 10 women were put on a work. They completed $\frac{1}{3}$ of the work in 4 days. After this 2 men and 2 women were increased. They completed $\frac{2}{9}$ more of the work in 2 days. If the remaining work is to be completed in 3 days, then how many more women must be increased ?
 (a) 32 (b) 8
 (c) 50 (d) 55
78. In three vessels, the ratio of water and milk is 6 : 7, 5 : 9 and 8 : 7, respectively. If the mixtures of the three vessels are mixed together, then what will be the ratio of water and milk ?
 (a) 2431 : 3781 (b) 3691 : 4499
 (c) 4381 : 5469 (d) None of these
79. A train starts from Delhi at 6 : 00 AM and reaches Ambala Cantt. at 10 AM. The other train starts from Ambala Cantt. at 8 AM and reaches Delhi at 11 : 30 AM. If the distance between Delhi and Ambala Cantt. is 200 km, then at what time did the two trains meet each other ?
 (a) 8 : 56 AM (b) 8 : 46 AM
 (c) 7 : 56 AM (d) 8 : 30 AM
- Directions (Qs. 80 to 84) :** Each of the questions given below is followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument. Give your answer as :
- (a) if only argument I is strong
 (b) if only argument II is strong
 (c) if either I or II is strong
 (d) if neither I nor II is strong
80. **Statement :**
 Should non-vegetarian food be totally banned in our country ?
Arguments :
 I. Yes. It is expensive and therefore beyond the means of most people in our country.
 II. No. Nothing should be banned in a democratic country.
81. **Statement :**
 Should India go in for computerisation in industry ?
Arguments :
 I. No. Computerisation demands a lot of money. We should not waste money on it.
 II. Yes. When advanced countries are introducing computers in various areas, how can we afford to lag behind.
82. **Statement :**
 Should personal tax be abolished in India ?
Arguments :
 I. Yes. It will motivate people to earn more.
 II. No. Individuals must learn to share their wealth with other people.
83. **Statement :**
 Should high chimneys be installed in industries ?
Arguments :
 I. Yes. It will motivate people to earn more.
 II. No. Individuals must learn to share their wealth with other people.
84. **Statement :**
 Should judiciary be independent of the executive ?
Arguments :
 I. Yes. This would help curb the unlawful activities of the executive.
 II. No. The executive would not be able to take bold measures.
- Directions (Qs. 85 to 88) :** In each of the questions below there is an inference, which is based on the given passage. Examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.
Mark your answer as :
 (a) if you think the inference is 'definitely true'.
 (b) if you think the inference is 'probably true' though not definitely true in the light of the facts given.
 (c) if you think the 'data is inadequate' i.e., from the facts given, you cannot say whether the inference is likely to be true or false.
 (d) if you think the inference is 'definitely false'.
- PASSAGE**
- The reforms are aimed at having an impact over a wide cross-section of the economy. With improvements and greater efficiency in mobilising and allocating resources, the basis will become stronger for promoting economic growth and development. The reforms aim at increasing efficiency of the financial sector and the range of financial services available within the economy. The introduction of bank capital adequacy and accounting standards, together with improvement in the regulation and supervision of financial institutions and capital market, is aimed at installing greater public confidence, ensuring safety and soundness of the financial system, bringing about greater transparency and accountability in operations and encouraging overall increased resources, mobilisation within the economy.
85. Prior to reforms, the banking sector was running inefficiently although resource allocation was efficient.
86. Bank capital adequacy was not in operation before reforms.
87. Public confidence has some connection with resource mobilisation.

sector.

Directions (Qs. 89 to 95) : Answer the following questions independently of each other based on the information given in each case.

89. In order to boost sales of toys at times other than the peak sale time – Christmas manufactures use many techniques – Character toys from movies or TV series are promoted and all sets are 'collectible' by their young purchasers. Collections, however, never appear to be complete, because as soon as all the characters are acquired, the child then requires the 'car', the 'phone', the 'mobile phone', and even the 'aeroplane' to ensure a happy environment for the toys. Ultimately, the elusive final piece of the series is attained just as the manufacturer and promoter release the next series of 'collectibles'.
- The prime aim of the manufacturer and promoter is to ensure that :
- (a) all children should be happy and no child can be happy without a complete series of toys.
 - (b) as soon as one set is complete or almost complete, then the next one arrives on the scene.
 - (c) children should be encouraged to complete their collections of toys.
 - (d) sales need to be bolstered throughout the year.
90. Pioneers of the motor-car industry realised that if they were going to meet the growing demand for their products, they had to adapt the labour force used in the productive process. Instead of many men working to complete all the stages of one car at a time, they assigned defined tasks to each man which they would repeat on every car.
- Which of the following can be concluded from the passage ?
- (a) Early motor-car manufacturers intended to increase productivity by applying the principle of division of labour.
 - (b) The car workers became disgruntled because they were assigned monotonous, repetitive tasks on the assembly line.
 - (c) Economies of scale enabled early motor companies to expand.
 - (d) A bad worker would perform the same task badly on each car leading to many more rejects.
91. There are three main factors that control the risks of becoming dependent on drugs. These factors are the type of drug, the personality of the individual and the circumstances in which the drug is taken. Indeed, it could be said that the majority of the adult population have taken alcohol, yet few have become dependent on it. Also, many strong drugs that have been used for medical purposes have not caused the patient to become addicted. However, it can be demonstrated that people who have taken drugs for fun are more likely to become dependent on the drug. The dependence is not always physiological but may remain psychological, although the effects are still essentially the same. Those at greatest risk appear to be personalities that are psychopathic, immature, or otherwise unstable.

morphine, cocaine and amphetamines. Physiological dependence is great with heroin and morphine, but less with amphetamines, barbiturates and alcohol.

Which of the following conclusions can be drawn from the text ?

- (a) One cannot become addicted to certain drugs if one has a strong personality,
 - (b) Taking drugs for "kicks" increases the possibility of becoming dependent on drugs.
 - (c) Psychological dependence is the greatest with heroin.
 - (d) Alcohol is a safe drug since very few people become dependent on it.
92. Every town with a pool hall has its share of unsavoury characters. This is because the pool hall attracts gamblers and all gamblers are unsavoury.
- Which of the following, if true cannot be inferred from the above ?
- (a) All gamblers are unsavoury.
 - (b) All pool halls attract gamblers.
 - (c) Every town has unsavoury characters.
 - (d) All gamblers are attracted by pool halls.
93. The use of petroleum products in the manufacture of plastics should be regulated and limited by law. Our country's need for petroleum for energy production is more vital than our need for plastics and our growing dependence on foreign sources of petroleum could have serious consequences if, for example, a war cuts off our access to these imports. By reducing our use of petroleum products in making plastics, we can take a major step towards national energy independence and so enhance our country's security.
- Which of the following, if true, would most greatly weaken the argument above ?
- (a) Only a small fraction of petroleum products consumed in this country is used in making plastics.
 - (b) New methods of plastics manufacture can somewhat reduce the amount of petroleum needed.
 - (c) The development of atomic energy as an alternative to petroleum-based energy has been slowed by legitimate concerns over safety.
 - (d) In times of war, combatant nations would be seriously tempted to seize forcibly the territories of petroleum producing nations.
94. For our nation to compete successfully in the high-technology enterprises of the future, workers with skills in mathematics and science will be needed. But it is doubtful that they will be available, since there is a shortage of high school mathematics and science teachers that shows no signs of improving. Industry can help alleviate this problem by funding scholarship grants and aids to college students who graduate in mathematics and science with the hope of pursuing teaching careers.
- Which of the following, if true, would most probably prevent the proposed plan from achieving its intended effect?

- (a) After graduation from college, most mathematics and science graduates opt for jobs in industry rather than in teaching.
 (b) Many high schools have been forced to lower their standards in hiring mathematics and science teachers.
 (c) More scholarship money is already available for students of mathematics and science than is available for those in any other field.
 (d) Population statistics shows that the number of high school students is expected to decline over the next ten years.

95. Seen from the perspective of potential, India is truly one of the most exciting places on earth. In the 16 years since Microsoft set up operations in India, I've seen first hand the incredible strides the country has made, building an information technology almost from scratch. This industry is an engine that has driven the creation of new opportunities for hundreds of thousands of people and established India as one of the world's most important centres for innovation. Thanks to the combination of rapid economic growth, an emerging middle class, and an impressive record of technical excellence, India stands as one of the great success stories of our time.

The essence of the above text is :

- (a) India is an exciting place and the excitement has been palpable ever since Microsoft set up its shop here.
 (b) Thanks to the prolific growth of the information technology industry, India has of late found its place on the global map.
 (c) It is technology, employment and innovation that have contributed to the emergence of a highly successful India over the past decade and a half.
 (d) India's success lies in its rapid unleashing of potential, whether it be in the economy, technology or the power to innovate.

Directions (Qs. 96 to 100) : In each of the questions below, there are two or three statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follow(s) from the given statements.

96. Statements :

Some singers are rockers.
 All rockers are westerners.

Conclusions :

- I. Some rockers are singers.
 II. Some westerners are rockers.
 III. Some singers are westerners.
 IV. Some singers are not westerners.

- (a) I, II and III follow (b) I, II and IV follow
 (c) II, III and IV follow (d) I, III and IV follow

97. Statements :

No Indian is an Asian.
 Some Americans are Indians.

Conclusions :

- I. Some Indians are not Asians.

II. Some Asians are not Americans.

III. Some Americans are not Asians.

IV. All Americans are Asians.

- (a) Either III or IV follows (b) Either I or II follows
 (c) I and III follow (d) Either II or III follows

98. Statements :

Some charts are darts.

All darts are carts.

Some carts are smarts.

Conclusions :

- I. Some charts are carts.
 II. Some carts are darts.
 III. Some darts are smarts.
 IV. Some smarts are charts.

- (a) Only I and II follow (b) Only II and III follow
 (c) I and II follow (d) I, III and IV follow

99. Statements :

Some big are small.

No small is large.

Some large are tiny.

Conclusions :

- I. Some large are not big.
 II. No big is large.
 III. Some small are not tiny.
 IV. Some big are not tiny.

- (a) Only I follows (b) Only II follows
 (c) Only III follows (d) None follows

100. Statements :

No killer is a sweater.

No jacket is a sweater.

Some jackets are roses.

Conclusions :

- I. Some roses are sweaters.
 II. Some roses are not sweaters.
 III. No killer is a jacket.
 IV. Some jackets are killers.
 (a) Either I or II and III follow
 (b) Either III or IV and II follow
 (c) Either II or III follows
 (d) Either I or II and either III or IV follow

101. There were two candidates in an election. 10% of the voters did not vote. 60 votes were declared invalid. The elected candidate got 308 votes more than his opponent. If the elected candidate got 47% of the total votes, how many votes did each candidate get?

- (a) 2316 and 2012 (b) 2629 and 2324
 (c) 2871 and 2575 (d) 2914 and 2606

102. Railway fares of 1st, 2nd and 3rd classes between two stations were in the ratio of 8 : 6 : 3. The fares of 1st and 2nd class were subsequently reduced by $\frac{1}{6}$ and $\frac{1}{12}$, respectively. If during a year, the ratio between the passengers of 1st, 2nd and 3rd classes was 9 : 12 : 26 and total amount collected by the sale of tickets was Rs 1088, then find the collection from the passengers of 1st class.

- (a) Rs 260 (b) Rs 280
 (c) Rs 300 (d) Rs 320

103. A ship, 40 km from the shore, springs a leak which admits $3\frac{3}{4}$ tonnes of water in 12 min. 60 tonnes would suffice to sink her, but the ship's pumps can throw out 12 tonnes of water in one hour. Find the average rate of sailing, so that she may reach the shore just as she begins to sink.

- (a) $1\frac{1}{2}$ km/h (b) $2\frac{1}{2}$ km/h
(c) $3\frac{1}{2}$ km/h (d) $4\frac{1}{2}$ km/h

104. Divide Rs 1,586 in three parts in such a way that their amounts at the end of 2, 3 and 4 yrs respectively, at 5% per annum simple interest be equal.

- (a) Rs 552, Rs 528, Rs 506 (b) Rs 560, Rs 520, Rs 506
(c) Rs 556, Rs 524, Rs 506 (d) Rs 548, Rs 528, Rs 510

105. In two alloys, the ratio of iron and copper is 4 : 3 and 6 : 1, respectively. If 14 kg of the first alloy and 42 kg of the second alloy is mixed together to form a new alloy, then what will be the ratio of copper to iron in the new alloy?

- (a) 11 : 3 (b) 11 : 8
(c) 8 : 1 (d) None of these

106. The cost price of two motor cycles is the same. One is sold at a profit of 15% and the other for Rs 4800 more than the first. If the net profit is 20%, find the cost price of each motor cycle.

- (a) Rs 48,000 (b) Rs 52,000
(c) Rs 36,000 (d) Rs 42,500

107. C is twice efficient as A. B takes thrice as many days as C. A takes 12 days to finish the work alone. If they work in pairs (i.e., AB, BC, CA) starting with AB on the first day, BC on the second day and AC on the third day and so on, then how many days are required to finish the work?

- (a) $6\frac{1}{5}$ days (b) 4.5 days
(c) $5\frac{1}{9}$ days (d) 8 days

108. A owes B Rs 1,573, payable $1\frac{1}{2}$ yrs hence. Also B owes A Rs.

1,444.50, payable 6 months hence. If they want to settle the account forthwith, keeping 14% as the rate of interest, then who should pay whom and how much?

- (a) A to B, Rs 28.50 (b) B to A, Rs 37.50
(c) A to B, Rs 50 (d) B to A, Rs 50

109. Consider the volumes of the following :

- A. A parallelopiped of length 5 cm, breadth 3 cm and height 4 cm.
B. A cube having each side 4 cm.
C. A cylinder of radius 3 cm and length 3 cm.
D. A sphere of radius 3 cm.

The volumes of these in the decreasing order is :

- (a) A, B, C and D (b) A, C, B and D
(c) D, B, C and A (d) D, C, B and A

110. If the areas enclosed by a circle or a square, and an equilateral triangle be the same, then the maximum perimeter is possessed by :

- (a) circle
(b) square
(c) equilateral triangle
(d) both triangle and square

111. If the height of a triangle is decreased by 40% and its base is increased by 40%, what will be the effect on its area?

- (a) No change (b) 8% decrease
(c) 16% decrease (d) 16% increase

112. If $\log_{12} 27 = a$, then $\log_6 16$ is :

- (a) $(3-a)/4(3+a)$ (b) $(3+a)/4(3-a)$
(c) $4(3+a)/(3-a)$ (d) $4(3-a)/(3+a)$

113. The ratio of the amount for two years under CI annually and for one year under SI is 6 : 5. When the ratio of interest is same, then the value of the rate of interest is :

- (a) 12.5% (b) 18%
(c) 20% (d) 16.66%

114. Consider the following statements :

If a sum of money is lent at simple interest, then the

I. money gets doubled in 5 yrs if the rate of interest is $16\frac{2}{3}\%$.

II. money gets doubled in 5 yrs if the rate of interest is 20%.

III. money becomes four times in 10 yrs if it gets doubled in 5 yrs.

Of these statements; :

- (a) I and III are correct (b) II alone is correct
(c) III alone is correct (d) II and III are correct

115. Which of the following is true?

A. $99/101 < 97/99 < 95/97$

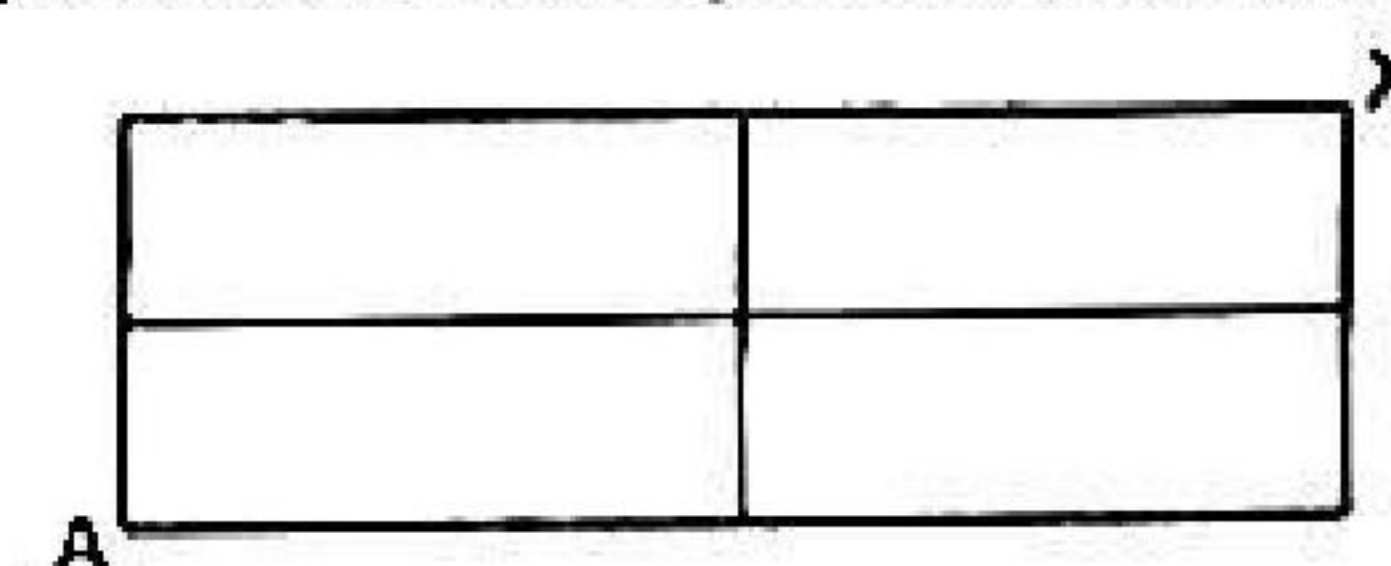
B. $95/97 < 97/99 < 99/101$

C. $\{95/97\}^2 > \{97/99\}^2 > \{99/101\}^2$

D. $\{95/101\}^2 > \{97/99\}^2 > \{95/97\}^2$

- (a) Only A (b) Only B
(c) Only B and C (d) Only B and D

116. In the figure below, how many paths are there from A to X if the only ways to move are up and to the right?



- (a) 4 (b) 5
(c) 6 (d) 9

117. A farmer has decided to build a wire fence along one straight side of his property. For this, he planned to place several fence-posts at 6 m intervals, with posts fixed at both ends of the side. After he bought the posts and wire, he found that the number of posts he had bought was 5 less than required. However, he discovered that the number of posts he had bought would be just sufficient if he spaced them 8 m apart. What is the length of the side of his property and how many posts did he buy?

- (a) 100 m, 15 (b) 100 m, 16
(c) 120 m, 15 (d) 120 m, 16

118. Four horses are tied on the four corners of a square field of 14 m length so that each horse can just touch the other two horses. They were able to graze in the area accessible to them for 11 days. For how many days is the ungrazed area sufficient for them?
 (a) 3 days (b) 4 days
 (c) 5 days (d) 2 days
119. The circumference of a circular ground is 88 m. A strip of land, 3 m wide, inside and along circumference of the ground is to be levelled. What is the budgeted expenditure if the levelling cost is Rs 7 per square m?
 (a) Rs 1,050 (b) Rs 1,125
 (c) Rs 1,325 (d) Rs 1,650
120. A survey on a sample of 25 new cars being sold at a local auto dealer was conducted to see which of the three popular options—air-conditioning, radio and power windows—were already installed.
 The survey found :
 15 had air-conditioning.
 2 had air-conditioning and power windows but no radios.
 12 had radios.
 6 had air-conditioning and radios but no power windows.
 11 had power windows.
 4 had radio and power windows.
 3 had all three options.
 What is the number of cars that had none of the options?
 (a) 4 (b) 3
 (c) 1 (d) 2
121. National Income of India is compiled by :
 (a) Finance Commission
 (b) Indian Statistical Institute
 (c) National Development Council
 (d) Central Statistical Organisation
122. Which is the best measure of economic growth of a country ?
 (a) GNP (b) GDP
 (c) Net revenue (d) None of these
123. A crossed cheque is one, which can be encashed only :
 (a) by the drawee
 (b) through a bank
 (c) at the State Bank of India
 (d) after it has been transferred to another person
124. Which of the following is the Banker of the Banks ?
 (a) IDBI (b) SBI
 (c) RBI (d) SBI and RBI
125. The period of the First Five Year Plan was from :
 (a) 1950-51 to 1954-55
 (b) 1951-52 to 1955-56
 (c) 1952-53 to 1956-57
 (d) None of the above
126. Who was the first women Prime Minister in the world ?
 (a) Indira Gandhi (b) Srimavo Bandaranaike
 (c) Margaret Thatcher (d) Benazir Bhutto
127. Rajdhani Express trains run :
 (a) only between National Capital and all State capitals
 (b) only between National Capital and State capitals
 (c) only between New Delhi and important cities
 (d) only between New Delhi and Mumbai, Kolkata and Chennai
128. Where are the headquarters of Volkswagen Auto Company?
 (a) France (b) Britain
 (c) USA (d) Germany
129. Maple leaf is the symbol of which country?
 (a) Canada (b) Australia
 (c) Kenya (d) Brazil
130. IRNSS is :
 (a) Indian Regional Navigational Satellite System
 (b) India's Rural Navigational Space System
 (c) India's Regional Navigational Space System
 (d) Indian Regional Navigational Space Satellite
131. India is planning to merge which among the following disease control programmes along with AIDS ?
 (a) Polio (b) TB
 (c) Hepatitis (d) None of these
132. Year 2007 would be observed as :
 (a) India-Japan Tourism year
 (b) India-Bhutan Tourism year
 (c) India-China Tourism year
 (d) India-Nepal Tourism year
133. Lots of western countries are these days attracted towards Asian countries and are entering into more and more business/trade agreements with them. Which of the following are the main factors for the same ?
 A. Huge untapped market.
 B. Availability of knowledge based human capital.
 C. Huge amount of capital parked idle.
 D. Saturation of the western market.
 (a) Only A and B (b) Only B and C
 (c) A, B and C only (d) A, B and D only
134. Which of the following is an organization of Software and Service Companies ?
 (a) NASDAQ (b) NCSA
 (c) NASSCOM (d) NCAER
135. Which of the following was/were not one of the high lights of the Union Budget 2006-07 ?
 A. No separate allotment for North-East regions. All funds clubbed together with Bharat Nirman Scheme.
 B. Service Tax net widened as more and more services are covered under it.
 C. Fiscal deficit estimated at around 4% of the GDP.
 (a) Only A (b) Only B
 (c) Only C (d) Both A and B
136. Which of the following sectors is now open for Foreign Direct Investment for the first time with 51 percent FDI allowed in it ?
 (a) Nuclear Power Generation
 (b) Airports and Civil Aviation
 (c) Automobile
 (d) Retail Sector
137. The XXI Winter Olympics will be held in 2010 at :
 (a) Tokyo (b) Minsk
 (c) Rome (d) Vancouver

138. As per the guidelines issued by the SEBI, the Permanent Account Number (PAN) is a must for which of the following ?
 (a) Demat Accounts
 (b) All Savings Bank Accounts
 (c) All Housing Loan Accounts
 (d) All Current Accounts
139. Which of the following banks was recently taken over by the Standard Chartered Bank ?
 (a) Bank of Bahrain and Kuwait
 (b) Development Bank of Singapore
 (c) Deutsche Bank
 (d) Federal Bank of Germany
140. Which of the following trophies is associated with the game of Football ?
 (a) Evert Cup (b) Merdeka Cup
 (c) Mumbai Gold Cup (d) Bharat Ram Cup
141. The terms "bull" and "bear" are used in the :
 (a) Bihar Government's Animal Husbandry Department
 (b) Income Tax Department
 (c) CBI
 (d) Stock Exchange
142. Bhakra Dam is built across the river :
 (a) Sutlej (b) Ravi
 (c) Jhelum (d) Chenab
143. Tetanus is a disease caused by :
 (a) fungus (b) virus
 (c) bacteria (d) insects
144. Light Year is a unit of :
 (a) intensity of light (b) distance
 (c) time (d) planetary motion
145. A tax that takes away a higher proportion of one's income as the income rises is termed as :
 (a) Progressive tax (b) Proportional tax
 (c) Regressive tax (d) Indirect tax
146. The famous International Company 'De Beers' is engaged in the business of :
 (a) Lager Beer (b) Animal skins
 (c) Shares and stocks (d) Diamonds
147. Commercial vehicles are not produced by which of the following companies in India ?
 (a) TELCO (b) Ashok Leyland
 (c) DCM Daewoo (d) Birla Yamaha
148. Who among the following has written the book, Wings of Fire : An Autobiography ?
 (a) Dr. A.P.J. Abdul Kalam
 (b) Shobha De
 (c) Atal Behari Vajpayee
 (d) K.R. Narayanan
149. Which of the following is not in courier business?
 (a) First Flight (b) DHL
 (c) Essar (d) FedEx
150. Match List-I with List-II and select the correct answer using the codes given below the lists :
- | List-I (Cities) | | List-II (Airports) | |
|-----------------|--|--------------------|--|
| A. Tokyo | | 1. Schiphol | |
| B. Paris | | 2. Narita | |
| C. Washington | | 3. Orly | |
| D. Amsterdam | | 4. Dulles | |
- Codes :**
- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 3 | 2 | 4 | 1 |
| (b) | 2 | 3 | 4 | 1 |
| (c) | 3 | 2 | 1 | 4 |
| (d) | 2 | 3 | 1 | 4 |
151. What is the chronological sequence of the following events in Indian Science scene ?
 A. Launching of Rohini-I satellite.
 B. Pokhran nuclear test.
 C. Start of Indian Space Research Organisation.
 D. First unit of Kalpakkam nuclear powers station going critical.
 Choose the correct answer from the codes given below :
 (a) A, B, D, C (b) B, C, D, A
 (c) C, B, A, D (d) D, A, C, B
152. The correct chronological order in which
 A. V.P. Singh B. Chandra Shekhar
 C. Moraji Desai D. Charan Singh
 occupied the office of the Prime Minister of India is :
 (a) C, D, B, A (b) D, C, B, A
 (c) C, D, A, B (d) D, C, A, B
153. Panchayati Raj was first introduced in India in October 1959 in :
 (a) Rajasthan (b) Tamil Nadu
 (c) Kerala (d) Karnataka
154. Which of the following statements are true about the Indian-born woman astronaut Kalpana Chawla ?
 A. She was born in Karnal.
 B. She flew on board the shuttle flight STS-87.
 C. She was trained at the Kennedy Space Centre.
 D. She did a space-walk to retrieve the Spartan Satellite.
 Select the correct answer using the codes given below :
 (a) A and B (b) B and C
 (c) A, B and C (d) A, B and D
155. Which of the following pairs is incorrect ?
 (a) Pasteur : Bacteriology
 (b) Newton : Law of Gravitation
 (c) Roentgen : X-rays
 (d) Faraday : Diffusion of gases
156. Match the items of the List-I with List-II and then select the correct answer from the codes given below the lists :
- | List-I | | List-II | |
|-------------------|--|--|--|
| A. Frequency | | 1. Oscillation in unit time | |
| B. Amplitude | | 2. A device consisting of a weight swinging on the end of a string | |
| C. Pendulum | | 3. Chemical elements in order of their atomic number | |
| D. Periodic table | | 4. Maximum departure from an equilibrium value | |

Codes :

	A	B	C	D
(a)	2	1	3	4
(b)	1	4	3	2
(c)	1	4	2	3
(d)	4	3	1	2

157. Which one of the following Fundamental Rights is also available to a foreigner on the soil of India ?

- (a) Equality of opportunity in the matter of public employment
- (b) Freedom of movement, residence and profession
- (c) Protection from discrimination on grounds only of religion, race, caste or sex
- (d) Protection of life and personal liberty against action without authority of law

158. In case of which of the following, the method of removal from office is the same ?

- I. A Judge of the Supreme Court
- II. Chief Election Commissioner
- III. President of India

- (a) I and II
- (b) II and III
- (c) I and III
- (d) I, II and III

159. Match the items of the List-I with the items of the List-II and then select the correct answer from the codes given below the lists following :

List-I	List-II
A. Chief Election Commissioner	1. Elected by Rajya Sabha
B. Deputy Chairman of Rajya Sabha	2. Elected by Lok Sabha
C. Chairman of the PAC	3. Appointed by Lok Sabha Speaker
	4. Appointed by the President

Codes :

	A	B	C
(a)	4	1	3
(b)	2	3	4
(c)	1	4	2
(d)	4	1	2

160. All India Services can be created by the :

- (a) President
- (b) UPSC
- (c) Prime Minister
- (d) Parliament

Directions (Qs. 161 to 164) : We define the entrepreneur as an individual who identifies opportunities, and on the basis of his/her ability, desire and confidence, makes judgements and decisions pertaining to the coordination of resources in order to exploit those opportunities for personal gain. Personal gain in this context could be financial, fame, prestige or satisfaction from helping other people. This definition extends the concept beyond the narrow limits of profit maximization. It is important to note the entrepreneurial decision making is distinct from routine managerial/administrative decision making by corporate executives. However, this definition

does include innovative venture decisions by executives and others in an already existing organization as legitimate entrepreneurial function. The entrepreneurial function consists of three main elements; recognition of opportunities, judgmental decision and coordination of resources. In terms of organization, the entrepreneur will be involved in risk bearing, autonomous decision making and residual claims.

Every person is potentially an entrepreneur. However, the extent of its manifestation in actual entrepreneurial activities, business or otherwise, is a matter of political, social, economic, cultural and ideological influences. Put differently, every human being has an innate ability to become an entrepreneur even though this ability is not always translated into action because of a variety of limiting factors. This observation allows us to propose that there are more than 5 billion entrepreneurs in this world, even, though this conjecture may not have been fully manifested in the practical world of business.

If there are more than 5 billion entrepreneurs in the world, how is it that there is such a dearth of entrepreneurs in the world of business ? This is an important question in view of the fact that business communities, academia and policy makers in the public realm have begun to talk about possibilities for fostering entrepreneurial growth in the global economy.

161. As per the passage, an entrepreneur is one who :

- (a) takes commercial venture decisions
- (b) exploits opportunities for personal gain
- (c) invites participation in decision-making
- (d) focuses on maximizing cash profits

162. Which of the following statements is NOT correct, according to the passage ?

- (a) There are more than 4 billion potential entrepreneurs in this world.
- (b) Not everybody can become an entrepreneur.
- (c) Entrepreneurial decision-making is different from managerial decision-making.
- (d) Executives in organizations can be either managers or entrepreneurs, but not both.

163. The passage mentions the following functions of an entrepreneur :

- (a) Risk-taking, decision-making, encouraging creativity.
- (b) Coordinating resources, recognizing opportunities and leading from the front.
- (c) Independent decision-making, exploiting opportunities and maximizing profits.
- (d) Making judgements, innovating and claiming responsibilities.

164. The passage implies that it is important to understand :

- (a) why there are so few entrepreneurs in business
- (b) the main functions of an entrepreneur
- (c) the factors which inhibit entrepreneurship
- (d) the meaning of personal gain for an entrepreneur

Directions (Qs 165 to 166) : Read the following passage carefully and then answer the questions that follow :

At the peak of the Battle of Britain, Winston Churchill said in the Commons on August 20, 1940, that 'never in the field of human conflict was so much owed by so many to so few'. Little did he then know how a majority of Indians would echo his sentiments. fifty years on, about 1.2 million of their compatriots. The latter have catapulted India into the international hi-tech orbit, lifting the contribution of the service sector in gross domestic product (GDP) to 52%-leaving industry and agriculture jostling for space in the rear.

The latest is that software and Information Technology (IT) services are expected to account for 7.7% of GDP by 2008, with software exports of around \$ 87 billion. That, in turn, should generate a demand for IT hardware of \$ 50 billion. The software industry employs more than 800,000 professionals with around 260,000 in software exports, 28,000 in the domestic software market, 280,000 in captive software user organizations and 24,5000 in the ITES-BPO sector. In fact, it has been planned to reach a teledensity of 9 per hundred by 2007 for New Delhi, to attain which 90 million direct exchange lines would be needed! That compares with just 20 million lines in 2000. Even India's cellular phone market is growing and investments exceeding Rs 25,000 crore are expected in the next three years, with a subscriber base of 120 million by 2008.

165. The underlined sentence in the first paragraph implies that :
- a large nation was indebted to a small army
 - the small hi-tech sector in India has helped us go global
 - quality mass education must be sacrificed at the altar of hi-tech education
 - the majority should be indebted to the minority
166. According to the author,
- 1.2 million Indians are significantly influencing the economy of India
 - Industry and agriculture have contributed to 48% of our GDP
 - New Delhi will need Rs. 25,000 crore to invest in 90 million direct exchange lines
 - 800,000 software professionals are expected to account for 7.7% of GDP by 2008

Directions (Qs. 167-170) : Select the pair of words that best expresses a relationship similar to the capitalized pair.

167. FLIMSY : STURDY
- prognosis : diagnosis
 - gauche : eloquent
 - flippant : earnest
 - drizzle : downpour
168. GREGARIOUS : OUTGOING
- groggy : lucid
 - grouchy : irritable
 - aggressive : extrovert
 - gritty : sociable
169. GUEST : INVITATION
- visitor : letter
 - applicant : application
 - petitioner : plea
 - witness : subpoena
170. SCHOOL : FISH
- group : deer
 - badge : honour
 - leaf : book
 - mischievous : monkeys

Directions (Qs. 171 to 176) : Read the following passage carefully and then answer the questions that follow :

The guy sitting grimly alone in the corner of the office may not be anti-social. He may, in fact, even be working. That could be one of the inferences drawn from a recent survey conducted by America Online and Salary. com. Socializing with co-workers, spacing out and surfing the Web could says the survey, cost US companies as much as \$ 759 billion in salary. The survey of 10,044 employees debunks some popular myths. Men and women were found to have wasted an equal amount of time at work. Older workers were significantly more attentive. As compared to the overall average of two hours a day being wasted, lunch-time not counted, workers over 55 were found to have wasted just 30 min. While 33% of the respondents said they wasted time because they were underpaid. However, not all time-wasting activities are detrimental to the organization. Salary. com senior vice-president Bill Coleman felt that personal use of the Internet could even be positive since it could generate new business ideas if not contribute to a happier work environment. "There is such a thing as creative waste. Not all wasted time is bad". Coleman was quoted by Reuters as saying.

A survey on time-wasting in Indian organizations could throw up interesting results. The most irritating waste of time is when those working inside the office are asked for directions by visitors. With receptionists and security staff also doing duty at the switchboard for telephone calls, it is usually the employee nearest the entrance who has to field queries ranging from 'Where is so and so ?' to 'Where is the toilet?' However, the most formally sanctioned way of wasting time in the Indian organization remains the office-meeting. Organizations are known to hold meetings at the drop of a hat. Even a decision to cut down on meetings would be taken at a meeting! The conference-hall is bigger than the canteen which serves a more useful purpose!

171. The central idea of the passage relates to :
- common ways of wasting time in Indian organizations
 - time-wasting in organizations
 - why time is wasted in organizations
 - ill-effects of time-wasting activities
172. Out of the following four options, which is the odd one out?
- Men and women waste an equal amount of time
 - Meetings are one of the most common ways to waste time
 - Younger workers waste time less
 - Some time-wasting activities are good for organizations
173. The passage does NOT deal with :
- efficient time management in organizations
 - US Workers' Survey
 - time wasting in Indian organizations
 - creative waste

174. The phrase 'creative waste' refers to :
 (a) wastage of time that is unproductive
 (b) wastage of time that is productive
 (c) time wasted during meeting
 (d) answering queries of visitors
175. From the passage, it may be inferred that :
 (a) more than 5000 respondents admitted to having wasted time at work
 (b) the conference hall is a more useful place than the meal canteen
 (c) men waste more time than women at work
 (d) on an average, more than two hours of a work day are wasted
176. One of the most common time-wasting activities in Indian organizations is :
 (a) answering telephone calls
 (b) sitting alone in a corner
 (c) holding official meetings
 (d) surfing the Web
- Directions (Qs. 177 to 181) : Choose the option that is nearly similar in meaning to the capitalized word.**
177. CONSISTENCY
 (a) congruity (b) constancy
 (c) compatibility (d) conformity
178. DYSPEPTIC
 (a) dynamic (b) dwarfish
 (c) roachery (d) crafty
179. INVALIDATE
 (a) invariable (b) nullify
 (c) naught (d) intractable
180. MISBEGOTTEN
 (a) misapprehension (b) misconception
 (c) purloined (d) delusion
181. STUMPED
 (a) bamboozled (b) subdued
 (c) subjugated (d) terrorized
- Direction (Qs. 181 to 185) : The questions that follow consist of groups of jumbled phrases. Only one of the four options, when unscrambled, can make a grammatically correct sentence. Disregarding punctuation errors, identify the correct options.**
182. (a) and the environmental authority/several type of complaints/by area residents/has been lodged with the plant
 (b) protagonist's who defeated/great stories portrays/enemy of/there community
 (c) how to be/the good manager/and a fox/both a hedgehog
 (d) own priorities/involves sorting/it always/out your
183. (a) communication skills as among/business students rank/the most important they have to master
 (b) as my replacement is/I cannot leave my desk/being late to come
 (c) still the hot issue's/this is why/celebrity endorsement are
 (d) are expected/will attend the summit/MD's and CEO's of top companies
184. (a) a heart-on-heart/I decided to have/talk with him
 (b) duped by a/I was/fly-in-the-night operator
 (c) throw my/I decided to/hat in the ring
 (d) came like/the announcement/a bolt from the heavens
185. (a) to the station/I hailed a taxi/to take me
 (b) spend his last few/he preferred to/days in relative anonymity
 (c) reached to me today/about my appointment/the officious communication
 (d) get the/pronunciation correct/you can't never
- Directions (Qs. 186 to 190) : In each of the questions below, only one statement is grammatically correct. Identify the correct one.**
186. (a) Seating arrangements influenced the kind of interaction that takes place
 (b) Seating arrangements's influence the kind of interaction that takes place
 (c) Seating arrangements influence the kind of interactions that take place
 (d) Seating arrangements influence the kind of interaction that take place
187. (a) Any organization, large or small, trades with many different people and companies
 (b) Any organization, large or small, trade with many different peoples and companies
 (c) Any organization, large or small, trade with many different people and company
 (d) Any organization, large or small, trades with many different people and companies
188. (a) Using too much jargons during communication might obliterate main issue
 (b) Using too much jargon during communication might obfuscate the main issue
 (c) Using too many jargons during the communication might obdurate a main issue
 (d) Using too much jargon's during communication might obfuscate the main issues
189. (a) In the course of there journey, they were able to absolve a lot of local cultures
 (b) In the coarse of their journey, they were able to absorb a lot of local culture
 (c) In the course of their journey, they were able to observe a lot of local culture's
 (d) In the course of their journey, they were able to observe a lot of the local culture
190. (a) Your advise does not seem to have had any effect
 (b) Your advice does not seem to have had any effect
 (c) Your advice do not seems to have had any effect
 (d) Your advise does not seem to have had any effects
- Directions (Qs. 191 to 195) : Choose the word which is OPPOSITE in meaning to each of the underlined word :**
191. His description of the event was rather pejorative.
 (a) laudatory
 (b) derogatory
 (c) predictive
 (d) adusive

192. Observing his agitation, we tried to **propitiate** the speaker.
 (a) provoke (b) placate
 (c) prohibit (d) facilitate
193. Muskan's **ubiquitous** smile helped to cheer us up in times of misery.
 (a) small (b) rare
 (c) common (d) frequent
194. Evidence of his moral **turpitude** influenced the committee's decision about his promotion.
 (a) courage (b) baseness
 (c) timidity (d) honourableness
195. Efforts at managing differences have, till date, been more **episodic** than otherwise.
 (a) intermittent (b) eventful
 (c) continuous (d) half-hearted
- Directions (Qs. 196 to 200) :** Each of the questions below consists of statements having four phrases (a), (b), (c) and (d). One of the phrases is grammatically incorrect. Identify the incorrect phrase.
196. (a) However, the advantages of teamwork can be minimized
 (b) and the benefits increased
 (c) if members (particularly those who lead them)
- (d) is aware of the methods for improving performance and making decisions
197. (a) When assertion is used with the win-win approach
 (b) and with others who also uses the win-win approach
 (c) each party can consider the needs of the other and
 (d) move towards a solution that satisfies as many needs as possible
198. (a) It is always
 (b) been hard to change
 (c) the Indian car buyer's perception
 (d) when it comes to designs
199. (a) In a conflict, speak in a pleasant way
 (b) send appropriate non-verbal messages to the other person
 (c) and match yours non-verbal behaviour
 (d) to the spoken message
200. (a) To live, to love
 (b) to serve, and
 (c) also admiration are what
 (d) I aspire for

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