

Directions for questions 01 to 02: Use the relationships defined below to solve these questions.

- A + B means A is the father of B.
- A – B means A is the daughter of B.
- A × B means A is the brother of B.
- A ÷ B means A is the mother of B.
- A = B means A is the son of B.
- A ≠ B means A is the sister of B.

1. Which among the following means “P is the father of T”?
 - (a) $P \times Q + R \div S = T$
 - (b) $T - S \neq R + Q \times P$
 - (c) $P \neq Q = R \div S = T$
 - (d) $T \neq S = R \div Q = P$
2. If $V = W \div X + Y = Z$, then V is the ___ of Z.
 - (a) Brother
 - (b) Husband
 - (c) Son
 - (d) Brother-in-law
3. From his house Charan travelled 5 km towards the East followed by 7 km towards his right. Further he travelled 5 km to his left followed by 8 km towards his right. Finally he turned towards left and travelled 6 km to reach his office. Find the vertical distance travelled by Charan.
 - (a) 21 km
 - (b) 15 km
 - (c) 14 km
 - (d) 18 km
4. What is the angle between the two hands of a clock at 10 hours 18 minutes?
 - (a) 210°
 - (b) 170°
 - (c) 161°
 - (d) 159°
5. There are two more days to go for my sister’s arrival. Six days ago when I talked to her she said she would write her last exam five days later and that she would leave three days after her last exam. If her last exam is on Tuesday, on which day of the week will my sister arrive?
 - (a) Wednesday
 - (b) Thursday
 - (c) Saturday
 - (d) Friday

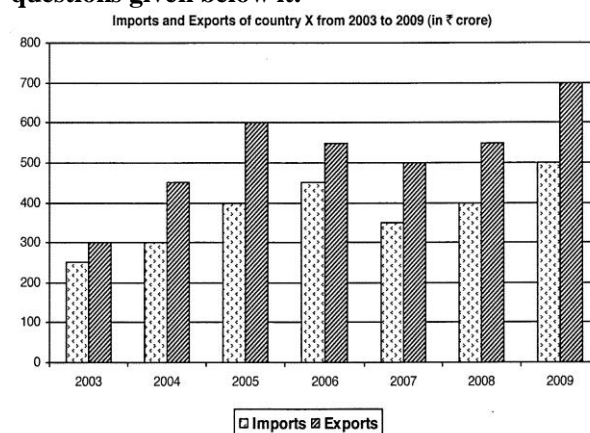
Directions for questions 6 to 8: These questions are based on the following information.

Out of five men — A, C, D, G and I — and five women — B, E, F, H and J — a group of five persons consisting of exactly two men is to be selected. It is also known that

- (i) among A, C, D and F, exactly two persons are to be selected.
- (ii) if A or D is selected, then none among E, F and H is to be selected.
- (iii) if G is selected, neither H nor J will be select
- (iv) I and E cannot be selected together.

6. Who among the men must be selected?
 - (a) C
 - (b) D
 - (c) G
 - (d) I
7. If E is selected, who among the following must be selected?
 - (a) B
 - (b) H
 - (c) I
 - (d) J
8. In how many different ways the group can be selected?
 - (a) Two
 - (b) Three
 - (c) Four
 - (d) Five

Directions for questions 09 to 12: Read the following graph carefully and answer the questions given below it.



9. What is the percentage rise in the exports from 2004 to 2005?
 - (a) 33.33%
 - (b) 25%
 - (c) 75%
 - (d) 40%
10. What is the difference between the total exports and the total imports during the years 2003, 2004 and 2005 in Rs.crore?
 - (a) 450
 - (b) 300
 - (c) 350
 - (d) 400
11. For which of the following years is the ratio between imports and exports the lowest?
 - (a) 2003
 - (b) 2006
 - (c) 2004
 - (d) 2007
12. During which year is the percentage rise/fall in exports over the previous year the lowest?
 - (a) 2004
 - (b) 2006
 - (c) 2008
 - (d) 2007

Directions for questions 13 to 15: In each question below is given a statement followed by two conclusions numbered I and II.

You have to consider everything in the statement to be true and decide which of the given conclusions logically follows beyond a reasonable

doubt from the information given in the statement.

Give your answer as

- (a) if only conclusion I follows.
- (b) if only conclusion II follows.
- (c) if neither I nor II follows.
- (d) if both I and II follow.

13. Statement:

There ought to be a law preventing children below 12 years from taking part in athletic events of marathon proportions.

Conclusions:

- I. Children below 12 years should not be allowed to take part in weightlifting.
- II. There is no law, at present, to prevent children below 12 years from taking part in athletic events of marathon proportions.

14. Statement:

Floods cause soil erosion; floods cause soil degradation.

Conclusions:

- I. Soil erosion causes soil degradation.
- II. Only floods cause soil degradation.

15. Statement:

The Indian economy will overtake Chinese economy by 2018, if it continues to grow at the present rate of eight percent.

Conclusions:

- I. The Chinese economy will grow at a rate less than eight percent.
- II. The Chinese economy has grown faster than the Indian economy in the past.

Directions for questions 16 to 18: These questions are based on the following information.

A survey was conducted among the residents of a colony about the readership of two newspapers — The Hindu and Hindustan Times. It was found that 20% of the residents in the colony neither read The Hindu nor Hindustan Times. 75% read only one of the two and 35% read only Hindustan Times. 30 residents read both the newspapers.

- 16. How many residents read only one newspaper?
(a) 450 (b) 300
(c) 600 (d) 225
- 17. How many residents read only The Hindu newspaper?
(a) 240 (b) 360
(c) 270 (d) 300
- 18. How many residents do not read The Hindu?
(a) 210 (b) 240
(c) 150 (d) 330

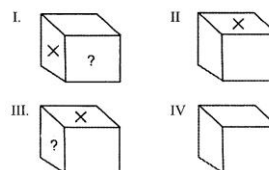
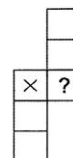
Directions for questions 19 to 21 : These questions are based on the following information.

A survey was conducted among the residents of a colony to find the different languages (English, Hindi and Marathi) known to them. 71 do not know any of the three languages. 120 know Marathi, 135 know Hindi and 164 know English. 50 know Marathi and Hindi. 71 know Hindi and English. 62 know Marathi and English. 28 people know all the three languages.

- 19. How many residents know exactly two languages?
(a) 99 (b) 127
(c) 173 (d) 214
- 20. How many residents know only one language?
(a) 73 (b) 96
(c) 137 (d) 91
- 21. How many residents do not know English?
(a) 95 (b) 171
(c) 144 (d) 255

Directions for questions 22 : In the following questions, the figure is folded to form a box. Select from among the alternatives the box or boxes that can be formed by folding the figure.

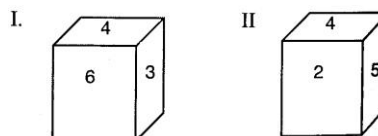
22.



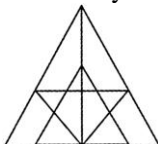
- (a) Only I, II and III
- (b) Only III and IV
- (c) Only II and IV
- (d) I, II, III and IV

Directions for questions 23: In each of the following questions two or three different views of the same die are given. The six faces of the die are marked with numbers 1 to 6. Answer the questions based on these diagrams.

23.



- What is the number on the face opposite 5?
 (a) 1 (b) 3
 (c) 2 (d) 6
24. 6,4,16,10,80, 70, _____
 (a) 84 (b) 184
 (c) 840 (d) 784
- 25.
- | | | | |
|---|---|---|----|
| 3 | 2 | 4 | 18 |
| 5 | 4 | 2 | 22 |
| 6 | 3 | 1 | 20 |
| 4 | 3 | 6 | ? |
- (a) 24 (b) 18
 (c) 26 (d) 28
26. 6 : 216 :: 4 : ?
 (a) 16 (b) 62
 (c) 256 (d) 8
27. F31H : I37K :: Q59M : ?
 (a) T65Q (b) T61Q
 (c) S65P (d) T61P
28. In a certain code language, if the word CATARACT is coded as UDBSBUBD, then how is the word DOUBLOON coded in that language?
 (a) OPPMCVPE (b) OPPNCVPE
 (c) OPPMCUPE (d) OPPMCVPE
29. In a certain code language, if PROTON is coded as $\emptyset\textcircled{\theta}\textcircled{\theta}\textcircled{\theta}\textcircled{\theta}$, REBATE is coded as $\textcircled{\text{R}}*\textcircled{\text{B}}*\textcircled{\text{R}}*$ and SHORE is coded as $\sum\Pi\theta\textcircled{\text{S}}$, then what is the code for the word TEASPOON in that language?
 (a) $\textcircled{\text{R}}*\textcircled{\text{S}}\sum\emptyset\theta\theta\textcircled{\text{A}}$
 (b) $\textcircled{\text{R}}*\textcircled{\text{S}}\sum\theta\theta\sum\textcircled{\text{A}}$
 (c) $\textcircled{\text{R}}*\textcircled{\text{S}}\sum\emptyset\theta\theta\textcircled{\text{A}}$
 (d) $\textcircled{\text{R}}*\textcircled{\text{S}}\sum\emptyset\theta\theta\textcircled{\text{A}}$
30. If '+' means '-', '-' means 'x', 'x' means '÷' and '÷' means '+', then find the value of the expression $25 + 32 \times 2 \div 3 - 8$
 (a) 64 (b) 96
 (c) 33 (d) 22
31. If 'a' means '-', 'b' means '+', 'c' means '÷' and 'd' means 'x', then find the value of the expression $4d[(5b4)d(6c2)]a12d8$.
 (a) 22 (b) 18
 (c) 10 (d) 12
32. How many tangles are there in the figure?

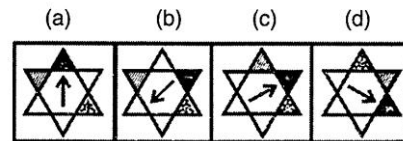


- (a) 21 (b) 25
 (c) 27 (d) 23
- 33.

Problem Figure

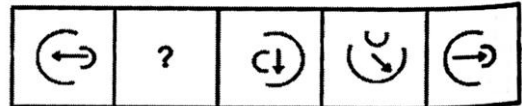


Answer Figure

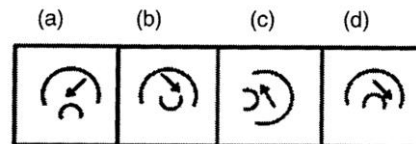


34.

Problem Figure



Answer Figure

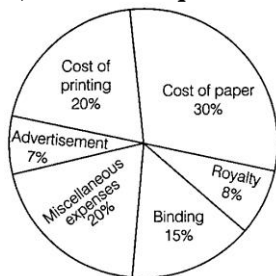


35. The first 50 natural numbers are written side by side. The number thus obtained is divided by 8. Find the remainder obtained.
 (a) 4 (b) 7
 (c) 2 (d) 6
36. The LCM and HCF of two numbers are 400 and 4 respectively. How many such pairs are possible?
 (a) 2 (b) 3
 (c) 4 (d) 5
37. The sum of first two odd numbers in a set of three consecutive odd numbers is eleven more than the third number. Find the smallest odd number.
 (a) 13 (b) 17
 (c) 15 (d) 19
38. In an examination consisting of 80 questions, four marks are given for every question attempted correctly and one mark is deducted for every question attempted wrongly. A student attempts all the questions and gets 80 marks. How many questions did he mark wrong?
 (a) 48 (b) 40
 (c) 52 (d) 32

39. Rupesh had two sons. He had some chocolate which he distributed among them. To his eldest son, he gave 3 chocolates more than half the number of chocolates with him. To his youngest son he gave 4 chocolate more than one-fourth of the remaining number of chocolates with him. He was left with 11 chocolates. How many chocolates did he initially have?
 (a) 34 (b) 46
 (c) 36 (d) 48
40. A earns Rs.5 more than B every hour. The ratio of the earnings per hour of A and B is 5 : 4. What are the combined earnings of A and B on a particular day in which both worked for sixteen hours each?
 (a) Rs.400 (b) Rs.720
 (c) Rs.860 (d) Rs.480
41. A sum of Rs.1800 was divided among P, Q, R and S such that one-sixth of P's share, one-fourth of Q's share, one-third of R's share and half of S's share were the same. Find P's share.
 (a) Rs.720 (b) Rs.750
 (c) Rs.735 (d) Rs.705
42. A shopkeeper raised the price of an article by 25% and reduced it by the same percentage. Find the net percentage change.
 (a) 6.25% more (b) 6.25% less
 (c) 3.125% more (d) 10% less
43. In a class of 300 students, 80% of them passed. By what percent is the number of students who failed less than those who passed?
 (a) 80% (b) 75%
 (c) 60% (d) 50
44. A sells an article to B at a profit of 10% and B sells the same article to C at a profit of 20%. If A buys the article for Rs.300, then at what price did C purchase?
 (a) Rs.390 (b) Rs.380
 (c) Rs.386 (d) Rs.396
45. A certain sum amounts to Rs.57600 after five years and to Rs.48960 in three years at simple interest. Find the rate of interest.
 (a) 10% p.a. (b) 14% p.a.
 (c) 12% p.a. (d) 6% p.a.
46. A certain sum becomes Rs.20720 in four years and Rs.24080 in six years at simple interest. Find sum and rte of interest.
 (a) Rs.12000; 12% p.a.
 (b) Rs.14000; 12% p.a.
 (c) Rs.12000; 15% p.a.
 (d) Rs.14000; 15% p.a.
47. In an exam, the average mark of the students of a class was calculated as 20. But as the marks of two students were wrongly recorded as 70 and 85 instead of 60 and 77, the actual average would be 2 marks less. Find the number of students who wrote the exam.
 (a) 11 (b) 12
 (c) 9 (d) 10
48. A class has 40 students. A total of Rs.250 was distributed among them. Each boy got Rs.8 and each girl got Rs.5.50. Find the number of boys.
 (a) 12 (b) 16
 (c) 20 (d) 28
49. The number of ways of arranging 10 books on a shelf such that two particular books are always together is
 (a) $9!2!$ (b) $9!$
 (c) $10!$ (d) 8
50. A and B can do a piece of work in 15 and 12 days respectively. A started the work and worked for 5 days and left. B can do the remaining work in
 (a) 6 days (b) 8 days
 (c) 9 days (d) 7 days.
51. A, B and C can do a piece of work in 10, 15 and 20 days respectively. A started the work and worked for 2 days and left, then B completed 25% of the remaining work and left, C completed the remaining work. How many days did C take to complete the remaining work?
 (a) 10 (b) 16
 (c) 14 (d) 12
52. A person covered 60 km travelling equal distances at 10 kmph, 20 kmph, 30 kmph. What is the total time taken to cover the distance?
 (a) $3\frac{2}{3}$ hours (b) $2\frac{1}{3}$ hours
 (c) $3\frac{1}{3}$ hours (d) $2\frac{2}{3}$ hours
53. Three cars have the ratio of their speeds as 5 : 6 : 7. Find the ratio of the times they would take to travel a certain distance.
 (a) 7 : 6 : 5 (b) 30 : 35 : 42
 (c) 5 : 6 : 7 (d) 42 : 35 : 30
54. A train, 245 m long, running at 60 kmph crosses another train moving in the same direction at 38 kmph in 90 seconds. What is the length of the second train?

- (a) 305 m (b) 335 m
 (c) 315 m (d) 325 m

Direction (Q. No. 55) : In the following pie chart, percentage expenses on various items during the production of a book are given. Based upon the information given in the pie chart, answer the question given below.



55. If the cost of paper is Rs.150000, then the expense on advertisement is
 (a) Rs.35000 (b) Rs.3500
 (c) Rs.40000 (d) Rs.25000
56. Raman scored 456 marks in an exam and Sita got 54% marks in the same exam, which is 24 marks less than Raman. If the minimum passing marks in the exam is 34%, then how much more marks did Raman score than the minimum passing marks?
 (a) 184 (b) 196
 (c) 190 (d) 180
57. Four friends A, B, C and D distribute some money among themselves in such a manner that A gets one less than B, C gets 5 more than D, D gets 3 more than B. Who gets the smallest amount?
 (a) A (b) B
 (c) C (d) D
58. Mr. Kumar drives to work at an average speed of 48 km/h. The time taken to cover the first 60% of the distance is 10 min more than the time taken to cover the remaining distance. How far is his office?
 (a) 30km (b) 40km
 (c) 45km (d) 48km

Direction (Q.59-60) : Find the missing number ‘?’ in the following.

59. 19, 12, 38, 13, ?, 14
 (a) 114 (b) 228
 (c) 57 (d) 76

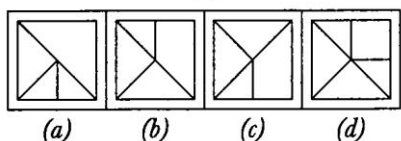
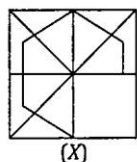
60.

1	7	8
3	6	4

5	4	2
2	7	5
2	6	?

- (a) 7 (b) 8
 (c) 4 (d) 3
61. In a mixture of 45 L, the ratio of milk and water is 2 : 1. If this ratio is to be 3 : 2, then the quantity of water to be further added is
 (a) 3 L
 (b) 5 L
 (c) 8 L
 (d) Cannot be determined
62. Out of a total of 120 musicians in a club, 5% can play all the three instruments, guitar, violin and flute. It so happens that the number of musicians who can play any two and only two of the above instruments is 30. The number of musicians who can play the guitar alone is 40. What is the total number of those who can play violin alone or flute alone?
 (a) 45 (b) 44
 (c) 38 (d) 30
63. 50 g of an alloy of gold and silver contains 80% gold (by weight). The quantity of gold that is to be mixed up with this alloy, so that it may contain 95% gold, is
 (a) 200 g (b) 50 g
 (c) 150 g (d) 10 g
64. A person starts from a point A and travels 3 km eastwards to B and then turns left and travels thrice that distance to reach C. He again turns left and travels five times the distance he covered between A and B and reaches his destination D. The shortest distance between the starting point and destination is
 (a) 18 km (b) 16 km
 (c) 15 km (d) 12 km
65. Consider the following figures of dice:
-
- What is the number opposite to 3?
 (a) 1
 (b) 4
 (c) 5
 (d) Data is insufficient
66. A rectangular water tank measures 15 m × 6 m at top and is 10 m deep. It is full of water. If water is drawn out lowering the level by 1 m, then how much of water has been drawn out?

- (a) 90000 L (b) 45000 L
 (c) 4500 L (d) 900 L
67. A shopkeeper sold goods for Rs.2400 and made a profit of 20% in the process. Find his profit per cent, if he had sold his goods for Rs.2700.
 (a) 35% (b) 30%
 (c) 45% (d) 40%
68. After distributing the sweets equally among 25 children, 8 sweets remain. Had the number of children been 28, 22 sweets would have been left after equally distributing. What was the total number of sweets?
 (a) 328 (b) 348
 (c) 358 (d) Data is inadequate
69. A person has a chemical of Rs.25 per litre. In what ratio should water be mixed in that chemical, so that after selling the mixture at Rs.20 per litre, he may get a profit of 25%?
 (a) 13 : 16 (b) 12 : 15
 (c) 16 : 9 (d) 19 : 22
70. Prabhakar is 15 yr older than Navin and Navin is 25 yr younger than Ashok. Which of the following represents the difference between the ages of Ashok and Prabhakar?
 (a) 40 yr
 (b) $(40 + 2N)$ yr
 (c) $(40 + N)$ yr
 (d) None of these
71. In a CSAT coaching class, 40% of the students enrolled for 'Reasoning Aptitude' and 30% of students enrolled for General Studies. 10% of the class enrolled for both 'Reasoning & Aptitude and General Studies'. If a student is selected at random from the class, then find the probability that he will be studying either 'Reasoning & Aptitude' or 'General Studies'.
 (a) 0.4 (b) 0.2
 (c) 0.6 (d) 0.5
72. Choose the alternative figure which will complete the question figure (X).



73. Each person's performance compared with all other persons is to be done to rank them subjectively. How many comparisons are needed in total, if there are 11 persons?
 (a) 66 (b) 55
 (c) 54 (d) 45
74. When in each box 5 or 6 dozens of apples were packed, three dozens were left. Therefore, bigger boxes were taken to pack 8 or 9 dozens of apples. However still three dozens of apples remained. What was the least number of dozens of apples to be packed?
 (a) 363 (b) 315
 (c) 345 (d) 335
75. A bag contains 7 black and 5 blue balls. If 2 balls are drawn from the bag at random, then what is the probability that both are of same colour?
 (a) $\frac{5}{11}$ (b) $\frac{31}{66}$
 (c) $\frac{35}{66}$ (d) $\frac{29}{66}$
76. A town has been established by the government recently in a well planned manner. The number of residents in this newly established town is increasing with each passing day in an exponential manner. Which of the following curves represents the increase in the number of residents with day?
-
- (a) A (b) B
 (c) C (d) D
77. 2 men and 1 woman board a bus in which 5 seats are vacant, one of these 5 seats is reserved for ladies. A woman may or may not sit on the seat reserved for ladies. In how many different ways can the five seats be occupied by these passengers?
 (a) 15 (b) 36
 (c) 48 (d) 60
78. A train overtakes two persons who are walking in the same direction in which the train is

going at the rate of 2 km/h, 4 km/h and passes them completely in 9 s and 10 s, respectively.

The length of the train is

- (a) 70 m (b) 80 m
(c) 60 m (d) 50 m

79. Each boy contributed rupees equal to the number of girls and each girl contributed rupees equal to the number of boys in a class of 60 students. If the total contribution thus collected is Rs.1600, then how many boys are there in the class?

- (a) 25 (b) 30
(c) 50 (d) Data inadequate

80. 5 students P, Q, R, S and T play different games. P and Q are good in hockey and tennis. S and P are good in hockey and rugby. R and Q are good in cricket and tennis. R, T and S are good in squash and rugby. Which student is good in rugby, cricket, tennis and squash?

- (a) P (b) Q
(c) R (d) S

ANSWERS KEYS

1	d	21	b	41	a	61	b
2	d	22	d	42	b	62	b
3	b	23	b	43	b	63	c
4	d	24	c	44	d	64	c
5	d	25	c	45	c	65	b
6	c	26	a	46	b	66	a
7	b	27	d	47	c	67	a
8	c	28	a	48	a	68	c
9	a	29	c	49	a	69	c
10	d	30	c	50	b	70	d
11	c	31	d	51	d	71	c
12	b	32	d	52	a	72	b
13	b	33	b	53	d	73	b
14	c	34	a	54	a	74	a
15	a	35	d	55	a	75	b
16	a	36	a	56	a	76	b
17	a	37	a	57	a	77	b
18	d	38	a	58	b	78	d
19	a	39	b	59	c	79	d
20	c	40	b	60	a	80	c