1. The product of two fractions is $14 / 15$ and their quotient is $35 / 24$. The greater fraction is
(1) $4 / 5$
(2) $7 / 6$
(3) $7 / 4$
(4) $7 / 3$
2. The cost of an article are Rs. 75. The cost was first increased by $20 \%$ and later on it was reduced by $20 \%$. The present cost of the article is :
(1) Rs. 60
(2) Rs. 72
(3) Rs. 90
(4) Rs. 75
3. Which one is in the Ascending Order in the following:
(1) $\frac{7}{6}, \frac{5}{4}, \frac{4}{3}, \frac{9}{7}$
(2) $\frac{7}{6}, \frac{5}{4}, \frac{9}{7}, \frac{4}{3}$
(3) $\frac{4}{3}, \frac{9}{7}, \frac{5}{4}, \frac{7}{6}$
(4) $\frac{9}{7}, \frac{4}{3}, \frac{7}{6}, \frac{5}{4}$
4. If 10 men or 20 boys can make 260 mats in 20 days, then how many mats will be made by 8 men and 4 boys in 20 days?
(1) 260
(2) 240
(3) 520
(4) 280
5. A man completes 30 km of a journey at the speed of $6 \mathrm{~km} / \mathrm{hr}$ and remaining 40 km of the journey in 5 hrs His average speed for the whole journey is
(1) $14 \mathrm{~km} / \mathrm{hr}$
(2) $7 \mathrm{~km} / \mathrm{hr}$
(3) $7.5 \mathrm{~km} / \mathrm{hr}$
(4) $8 \mathrm{~km} / \mathrm{hr}$
6. Four bells ring at intervals $6,12,18,24$ seconds. They starts ringing simultaneously at 8 ' $O$ ' clock. When will they ring again together
(1) 1 minute 12 seconds past 8
(2) 2 minutes 24 seconds past 8
(3) 5 minutes 17 seconds past 8
(4) 2 minutes 27 seconds past 8
7. 'A cricketer had a certain average of runs for his 64 innings In his $65^{\text {th }}$ inning, he is bowled out for no score on his part. This brings down his average by 3 runs His new average of runs is
(1) 195
(2) 130
(3) 192
(4) 128
8. If $x=\sqrt{136+\sqrt{52+\sqrt{144}}}$ then value of $x$ equals:
(1) 12
(2) 11
(3) 10
(4) 13
9. A fruit seller buys bananas at 2 for a rupee and sells them at 5 for three rupees. His profit percent is
(1) 25
(2) 10
(3) 15
(4) 20

Directions (Q. 10 to Q.12) : The following pie diagram shows the expenditure incurred on the preparation of a book by a publisher under various heads:
(A) Paper 20\%
(B) Printing 25\%
(C) Binding Designing 30\%
(D) Royaly $15 \%$ or
(E) Miscellaneous 10\%

10. What is the angle of Pie diagram showing the expenditure incurred on paying royalty:
(1) $54^{\circ}$
(2) $45^{\circ}$
(3) $48^{\circ}$
(4) $60^{\circ}$
11. Which two expenditure together will form an angle of $108^{\circ}$ at the centre of pie-diagram:
(1) $B$ and $E$
(2) A and E
(3) A and D
(4) D and E
12. If the difference between the expenditure be represented by $18^{\circ}$ in the pie-diagram. These expenditures are:
(1) B and E
(2) A and C
(3) B and D
(4) B and C
13. A number whose double is 48 greater than its half is:
(1) 30
(2) 32
(3) 31
(4) 29
14. Value of $1+\frac{1}{1+\frac{1}{1-\frac{1}{6}}}$ is
(1) $\frac{16}{11}$
(2) 1
(3) $\frac{11}{16}$
(4) 10
15. How many numbers between 11 and 90 are divisible by 7 ?
(1) 10
(2) 11
(3) 12
(4) 7
16. Given that $2 x-y+z=240$. If $z=2 y, y=2 x$, then $\mathrm{x}=$ ?
(1) 0
(2) 50
(3) 70
(4) 60
17. Ratio of milk is to water in certain solution of 75 litres is $2: 1$. How much water is to be mixed in solution so that ratio becomes 1:2.
(1) 75 litres
(2) 60 litres
(3) 65 litres
(4) 80 litres
18. Simple interest on a sum of money is $\frac{1}{25}$ of the principal and the number of years is equal to the rate percent per annum is:
(1) $2 \frac{1}{2} \%$
(2) $2 \%$
(3) $31 / 2 \%$
(4) $1 \frac{1}{1} 2 \%$
19. The average of the first 100 natural number is:
(1) 51
(2) 100
(3) 50.5
(4) 101
20. The unit's digit in the expansion $(2317)^{759}$ is:
(1) 7
(2) 9
(3) 3
(4) 1

Directions (Q. 21 to $\mathbf{Q} .25$ ) : Refer following diagram. Read the statements and choose the letter of the region which correctly represent the statement in venn diagram.

21. Students who took chemistry but opted neither Maths nor Physics:
(1) b
(2) e
(3) g
(4) d
22. Students who took Maths and Physics both
(1) a
(2) c
(3) g
(4) $e$
23. Students who took all three subjects i.e. Physics, Chemistry and Maths:
(1) $e$
(2) d
(3) g
(4) f
24. Students who took Physics and Chemistry both:
(1) f
(2) g
(3) e
(4) d
25. Students who did not take any of the three Subjects:
(1) d
(2) g
(3) f
(4) h
26. Pointing to a photograph, a man said, "I have no brother or sister but that man's father is my father's son". Whose photograph was it:
(1) His nephew's
(2) His father's
(3) His son's
(4) His own
27. Insert the missing number:



(1) 5
(2) 19
(3) 27
(4) 89
28. Choose the correct alternative which shows the same relationship with the word as the words of the given Pair bear:
Sword : Slaughter : : Auger : ?
(1) Dig
(2) Carve
(3) Bore
(4) Grind
29. Select the wrong number in the series:
$6,26,123,214,341$
(1) 26
(2) 62
(3) 123
(4) 214
30. In given figures, how many squares are there ?

(1) 28
(2) 32
(3) 16
(4) 30
31. Insert the missing number:

| 5 | 26 | 1 |
| :---: | :---: | :---: |
| 9 | 84 | 3 |
| 11 | $?$ | 5 |

(1) 104
(2) 146
(3) 126
(4) 60

Direction (Q. 32 to $\mathbf{Q . 3 4 )}$ : Select the pair that has the same relationship as the original pair of words/numbers:
32. 11 : 1210
(1) $6: 216$
(2) $7: 1029$
(3) $8: 448$
(4) $9: 729$
33. $\mathrm{ADG}: \mathrm{KNQ}$ : : BEH : $\qquad$
(1) CFI
(2) ILO
(3) LOR
(4) MPS
34. Part : Whole : : Arc : $\qquad$
(1) Area
(2) Chord
(3) Circumference
(4) Segment
35. In a code language 'LONDON' is written as MPOEPO, what is CPNCBZ?
(1) DQODCA
(2) MADRAS
(3) BOMBAY
(4) RAJKOT
36. A man is facing East. He turms $135^{\circ}$ in the anticlockwise direction and then $90^{\circ}$ in the clockwise direction. Which direction is he facing now.
(1) North-East
(2) North-West
(3) South-West
(4) South-East
37. Which two months in a year have the same calender:
(1) June, October
(2) April, November
(3) April, July
(4) October, December
38. Dipti is performing Shirshasan facing towards West. In which directin will her right shoulder be ?
(1) North
(2) East
(3) West
(4) South

Directions(Q. 39 to Q.41): Which answer figure will correctly complete the given figure ?
39.

(1)

(2)

(3)

(4)

40.

(1)

(2)

(3)

(4)

41.


Answer figure
(1)

(2)

(3)

(4)

42. There is a definite relationship between figures $A$ and B. Establish a similar relationship between figures $C$ and $D$ by selecting a suitable figure from the answer set:

## Problem figure:



## Answer Figures

(1)

(2)

(3)

(4)


Directions (Q. 43 to Q.45) : Select the answer (1, 2, 3, 4) which has the same relationship to the third figure which is between the first two figures on the left of sign : :
43. Problem figure:

(1)

(2)

(3)

(4)

44.

(1)

(2)

(3)

(4)

45.

(1)

(2)

(3)

(4)


Directions(Q. 46 to 48): Complete the given series by choosing the appropriate answer:
46. Problem figure

(1)

(2)

(3)

(4)

47. Problem figure

(1)

(2)

(3)

(4)

48. Problem Figure

(1)

(2)

(3)

(4)

55. Which of the following diagrams indicates the relation between Iron, Lead and Nitrogen?
(1)

(2)

(3)

(4)

56. Which of the following diagrams indicates the relation between Bulb, Lamp and Light?
(1)

(2)

(3)

(4)

57. In the following figure, triangle represents 'girls', square, 'players' and circle, 'coach'. Which part of the diagram represents the girls who are players but not coach?

(1) $P$
(2) Q
(3) R
(4) S
58. The diagram given below represents those students who play Cricket, Football and Kabaddi. Study the diagram and identify the students who play all three games.

(1) $P+Q+R$
(2) $V+T$
(3) $S+T+V$
(4) S

Directions(Q. 59 to Q.62): P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:

1. $P$ is second to the right of $T$ who is the neighbour of R and V .
2. $S$ is not the neighbour of $P$.
3. $V$ is the neighbour of $U$.
4. Q is not between S and W, and W is not between U and S .

Answer the questions from the above sitting arrangement.
59. Who two of the following are not neighbours?
(1) RV
(2) UV
(3) RP
(4) QW
60. Who is immediate right to the V ?
(1) $P$
(2) U
(3) R
(4) T
61. Which of the following is correct?
(1) P is to the immediate right of Q
(2) $R$ is between $U$ and $V$
(3) Q is to the immediate left of W
(4) $U$ is netween $W$ and $S$
62. What is the position of $S$ ?
(1) Between $U$ and $V$
(2) Second to the right of $P$
(3) To the immediate right of W
(4) Data inadequate

Directions(Q. 63 to Q.66): Five girls are sitting on a bench to be photographed Seema is to the left of Rani and to the right of Bindu, Mary is to the right of Rani. Reeta is between Rani and Mary. Answer the questions from the above sitting arrangement.
63. Who is sitting immediate right to Reeta ?
(1) Bindu
(2) Rani
(3) Mary
(4) Seema
64. Who is in the middle of the photograph?
(1) Bindu
(2) Rani
(3) Reeta
(4) Seema
65. Who is second from the right in the photograph?
(1) Mary
(2) Rani
(3) Reeta
(4) Bindu
66. Who is second from the left in photograph?
(1) Reeta
(2) Mary
(3) Bindu
(4) Seema

Directions(Q. 67 to Q.69): Choose the word which is different from the rest.
67.
(1) Producer
(2) Director
(3) Investor
(4) Financer
68. (1) Calendar
(2) Year
(3) Day
(4) Month
69. (1) Mumbai
(2) Cochin
(3) Kandla
(4) Mysore
70. If $A+B$ means $A$ is the father of $B ; A-B$ means A is the brother $\mathrm{B} ; \mathrm{A} \% \mathrm{~B}$ means A is the wife of B and $\mathrm{A} \times \mathrm{B}$ means A is the mother of B , which of the following shows that M is the maternal grandmother of T?
(1) $M \times N \% S+T$
(2) $\mathrm{M} \times \mathrm{N}-\mathrm{S} \% \mathrm{~T}$
(3) $\mathrm{M} \times \mathrm{S}-\mathrm{N} \% \mathrm{~T}$
(4) $\mathrm{M} \times \mathrm{N} \times \mathrm{S} \% \mathrm{~T}$
71. 1. B 5 D means B is the father of D .
2. B 9 D means B is the sister of D .
3. B 4 D means B is the brother of D .
4. B3D means B is the wife of D.

Which of the following means $F$ is the mother of $K$ ?
(1) F3M5K
(2) F5M3K
(3) F9M4N3K
(4) F3M5N3K
72. If POND is coded RSTL how is HEAR written in the code ?
(1) GHIJ
(2) JIGZ
(3) GHIZ
(4) None of these
73. If SPIDER is coded as PSDIRE, how is COMMON written in that code?
(1) OCMMNO
(2) OCMMOO
(3) OCMOON
(4) OCMOMN

Directions(Q. 74 to Q.76): All the six members of a family $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E} \& \mathrm{~F}$ are staying together. B is the son of $C$ but $C$ is not the mother of $B$. A \& $C$ are married couple. E is the brother of $\mathrm{C} . \mathrm{D}$ is the daughter of $\mathrm{A} . \mathrm{F}$ is the brother of $B$.
74. How many male members are there in the family?
(1) 1
(2) 2
(3) 3
(4) 4
75. Who is the mother of $B$ ?
(1) D
(2) F
(3) A
(4) E
76. How many children does $A$ have ?
(1) 1
(2) 3
(3) 2
(4) 4
77. Which digit will appear on the face opposite to the face with number 3 ?

(1) 4
(2) 5
(3) 6
(4) 2
78. Which number is on the face opposite to 6 ?

(1) 4
(2) 1
(3) 2
(4) 3
79. Which sign will be opposite to ' + ' ?

(1) $\%$
(2) -
(3) $\times$
(4) \$

Directions(Q. 80 to $\mathbf{Q . 8 7 ) : ~ F i n d ~ o u t ~ t h e ~ a l t e r n a t i v e ~ w h i c h ~}$ will replace the question mark.
80. AZBY : CXDW :: EVFU : ?
(1) GTHS
(2) GHTS
(3) GSTH
(4) TGSH
81. ZRYQ : KCJB :: PWOV : ?
(1) GBHA
(2) ISJT
(3) ELDK
(4) EOFP
82. Computer : fqprxvht :: Language : ?
(1) oxpixdig
(2) ocqicyig
(3) ocqixcjg
(4) ocqixcig
83. ACEG : ? :: BDFH : KMOQ
(1) NLPR
(2) LMNO
(3) JLNP
(4) JNLO
84. $\mathrm{M} \times \mathrm{N}: 13 \times 14:: \mathrm{F} \times \mathrm{R}:$ ?
(1) $14 \times 15$
(2) $5 \times 17$
(3) $6 \times 18$
(4) $7 \times 19$
85. Conference : Chairman :: Newspaper: ?
(1) Reporter
(2) Distributor
(3) Printer
(4) Editor
86. Problem figures

(1)

(2)

(3)

(4)

87. Problem Figures

88. Find the number of tirangle in the figure below. Problem figure

(1) 8
(2) 10
(3) 12
(4) 14
89. Find the minimum number of straight lines required to make the given figure.

(1) 16
(2) 17
(3) 18
(4) 19
90. Count the number of squares in the given figure.

(1) 8
(2) 12
(3) 15
(4) 18

Direction (Q.91 \& Q.92) : Find out the alternative figure which contains figure $(\mathrm{x})$ as its part.
91.

(x)
(1)

(2)

(3)

(4)

92.

(x)
(1)

(2)

(3)

(4)


Directions(Q.93 \& Q.94): Find out which of the figures (1), (2), (3) and (4) can be formed from the pieces given in figure $(\mathrm{x})$.
93.

(1)

(2)

(3)

(4)

94.

(1)

(2)

(3)

(4)


Directions (Q. 95 to Q.98) : Identify the figure that com-
pletes the pattern (x).
95.

(x)
(1)

(2)

(3)

(4)

96.

(1)

(2)

(3)

(4)

97.

(1)

(2)

(3)

(4)

98.

(x)
(1)

(2)

(3)

(4)


Directions (Q. 99 \& $\mathbf{Q . 1 0 0 ) : ~ I n ~ t h e s e ~ s e r i e s , ~ t h e r e ~ a r e ~}$ both letter pattern and number pattern. Fill the blank in series.
99. $\mathrm{ZA}_{5}, \mathrm{Y}_{4} \mathrm{~B}, \mathrm{XC}_{6}, \mathrm{~W}_{3} \mathrm{D}$, ?
(1) $E_{7} V$
(2) $\mathrm{V}_{2} \mathrm{E}$
(3) $\mathrm{VE}_{5}$
(4) $\mathrm{VE}_{7}$
100. DEF, $\mathrm{DEF}_{2}, \mathrm{DE}_{2} \mathrm{~F}_{2}, \mathrm{DE}_{2} \mathrm{~F}_{2}$, ?, $\mathrm{D}_{2} \mathrm{E}_{2} \mathrm{~F}_{3}$
(1) $\mathrm{DEF}_{3}$
(2) $D_{3} E F_{3}$
(3) $D_{2} E_{3} \mathrm{~F}$
(4) $\mathrm{D}_{2} \mathrm{E}_{2} \mathrm{~F}_{2}$

