SAMPLE PAPER-01

MENTAL ABILITY TEST

Direction (Q.1 to Q.10): Read the questions carefully and give the answer by putting a cross-mark (x) inside the circle of the letter denoting your selected answer on the Answer-Sheet.

- 1. When the price of onion is decreased by 25% it becomes Rs. 48/K.g. What was the previous price?
 - (1) Rs. 80/K.g.
- (2) Rs. 56/K.g.
- (3) Rs.64/K.g.
- (4) Rs.96/K.g.
- 2. A cistem can be filled up by two pumps in 20 minutes and 30 minutes respectively. They are made to run jointly, but for technical fault the 2nd pump was run alone lastly for 10 minutes. For what time they are run jointly?
 - (1) 4 minutes
- (2) 6 minutes
- (3) 8 minutes
- (4) 10 minutes
- 3. In a class there are 38 students of age average 15 years. When two new students in the age ratio 1.4: 1.6 admitted, the age average did not change. Then the age of the younger student be admitted
 - (1) 7 years
- (2) 8 years
- (3) 14 years
- (4) 16 years
- 4. When the price of groceries increased by 25%, the amount of groceries sold decreased by 25%. The effect on the sales of a shop is
 - (1) 5% increase
- (2) 10% decrease
- (3) 10% increase
- (4) 6.25% decrease
- 5. The perimeter of a rectangle and a square is same, i.e. 80 meter. But length and breadth of the rectangle is in the ratio 3:5. The ratio of area rectangle: square is
 - (1) 8 : 7
- (2) 3 : 5
- (3) 15 : 16 (4) 7 : 8
- 6. If (a - b) is 6 more than (c + d) and (a + b) is 3 less than (c - d), then (a - c) is
 - (1) 0.5
- (2) 1
- (3) 1.5
- (4) 2.0
- **7**. Choose the two correct numbers in the marked places of the multiplication below

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

- 8. It is known that 20% of the mangoes are rotten. If the number of rotten mangoes is 35, then the total number of mangoes is
 - (1) 150
- (2) 180
- (3) 175
- (4) 185
- In a family the father took $\frac{1}{4}$ of the cake and he 9. had 3 times as much as others had. The total number of family members is
 - (1) 3
- (2) 15
- (3) 10

(3) 140

- (4) 12
- If $(64)^2 (36)^2 = 20z$, the value of z is **10**.
- (2) 180
- (4) 120

Direction (Q.11 to Q.20): In each of question below, there is a number series with one term missing shown by '?'. The term is given as one of the alternatives among five numbers given below it. Find the term and indicate your answer by putting a cross-mark (x) inside the circle of the corresponding letter of alternatives in the Answer Sheet.

- 3, 7, 13, 27, 53?
 - $(1)\ 105$
- (2) 106
- (3) 107
- (4) 108
- 19, 2, 38, 3, 114, 4, ?
 - (1) 228
- (2)256
- (3)356

(3)48

- (4) 456
- 3, 8, 15, 24, 35? **13**.
 - (1) 44
- (2)46
- (4) 50
- 14. 0, 2, 8, 14, 24, 34, ?
 - (1)48
- (2)42
- (3)40
- (4)38
- **15**. 3, 15, 4, 16, 5,17,6, ?, 7
 - (1) 12
- (2) 18
- (3) 15
- (4) 13
- **16**. 6, 18, 72, 360, 2160, ?
 - (1) 12120 (2) 13120
- (3) 14120
- (4) 15120
- **17**. 6, 11, 21, 36, 56, ?
 - (1)48
- (2)42
- (3)40
- (4) 36
- 7, 14, 23, 34, 47, ? 18.
 - (1)62
- (2)60
- (3)64
- (4)66
- **19**. 20, 27, 23, 37, 26, ?
 - (1) 44
- (2)47
- (3)50
- (4)53
- 20. 4, 5, 7, 10, 11, 13, 16, ?
 - (1) 17
- (2) 18
- (3) 19
- (4) 21

Direction (Q.21 to Q.30): In each of the questions, there are four items, three of which are alike by some means or other while one is out of the class. Find out the odd item and indicate your answer by putting a cross-mark (x) inside the circle of the corresponding letter on the Answer-Sheet.

- **21.** (1) 27 (2) 64 (3) 81 (4) 125 **22.** (1) Square (2) Circle
- (3) Parallelogram (4) Rectangle
- **23.** (1) Motor-cycle (2) Scooter (3) Bi-cycle (4) Van
- (3) Bi-cycle (4) Van **24.** (1) Rocket (2) Aeroplane
- (3) Helicopter (4) Van-rickshaw **25.** (1) Lion (2) Hen (3) Crow (4) Frog

(4) Venus

- 26. (1) Doctor (2) Teacher (3) Student (4) Head-master
- **27.** (1) Earth (2) Moon (3) Mars **28.** (1) Ear (2) Eye (3) Tongue (4) Blood
- (3) Tongue (4) Blood

 29. (1) Zoology (2) Physiology
 (3) Botany (4) Philosophy
- **30.** (1) Oxygen (2) Nitrogen (3) Phosphorous (4) Antimony

Direction (Q.31 to Q.40): In each question below there are two words separated by ':' in the upper row. Below that there are some words on each side of the symbol ':'. Find the relation between two upper words and select one word from the right side of ':' below which have the same relation as above. Put a cross-mark (x) inside the circle of the letter denoting your selected answer on the Answer-Sheet.

31. Freud : Psychology
Gandhiji : ?

Tajmahal : Agra

- (1) Science(2) Mathematics(3) Philosophy(4) Geology
- Brindaban Garden : ?
 (1) Hydrabad (2) Mysore
- (3) Pune (4) Jodhpur **33.** Dog : Bark
- Child: ?
 (1) Shout (2) Mother
 (3) Sweet (4) Cry
- **34.** Calculus : Algebra Mean : ?
 - (1) Light(2) Statistics(3) Trignometry(4) Sonometer

35. Coal: Thermal power Water:? (1) Cloud (2) Rain (4) Ice (3) Steam-engine **36**. Car: Garage Aeroplane:? (1) Depot (2) Hanger (3) Station (4) Airport **37**. Flower: Bud Plant:? (1) Seed (2) Fruit (3) Rower (4) Root **38**. Tongue: Taste Eye : ? (1) Hear (2) Vision (3) Smell (4) Touch **39**. Helium: Argon Sodium:? (1) Radium (2) Neon (3) Thorium (4) Calcium 40. Teacher: Student Minister:? (1) Voter (2) Patient

Direction (Q41 to Q.50): In each question, numbers are placed in figures on the basis of some rules. One place in the figure is indicated by the interogation sign (?). Find out the correct alternative to replace the question mark and indicate your answer by putting a cross-mark (x) inside the circle of the corresponding letter of alternatives in the Answer-Sheet.

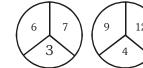
(4) Police

(3) Public

14 20 5 9 41. 9 17 27 (1) 35(3)39(2)37(4) 4116 28 39 53 42. 31 43 54 ? (1)68(2)75(3)77(4)7916 25 49 64 43. (1) 14(2)77(3)81(4) 113

32.

44.



- (1) 18
- (2) 19
- (3)20
- (4) 21

45.



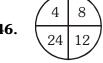




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- (1)70
- (2)75
- (3)80
- (4) 90

46.

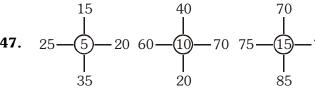






- (1) 32
- (2)36
- (3)80
- (4) 8

47.



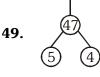
- (1) 35
- (2)45
- (3)55
- (4)65

48.



- 16 24
- 24 27 36

- (1) 17
- (2) 18
- (3) 19
- (4) 20



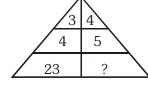
(1)70





- (2)77
- (3)84
- (4)91

50.



- (1)9
- (2) 18
- (3)25
- (4) 34

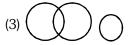
Directions(Q.51 to Q.53): Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

- **51**. A, CD, GHI, ?, UVWXY
 - (1) KLMN
- (2) LMNO
- (3) MNOP
- (4) NOPQ

- **52**. ADVENTURE, DVENTURE, DVENTUR, ?, **VENTU**
 - (1) VENTUR
- (2) VENTURE
- (3) DVENT
- (4) DVENTU
- **53**. UPI, ?, ODP, MBQ, IAW
 - (1) SIJ
- (2) SHJ
- (3) RHJ
- (4) TIJ
- **54**. Which of the following diagrams indicates the relation between Judge, Thieves and Criminals?









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









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

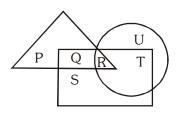






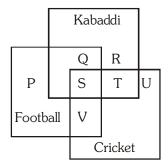


57. In the following figure, triangle represents 'girls', square, 'players' and circle, 'coach'. Which part of the diagram represents the girls who are players but not coach?



- (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 B; A % B means A is the wife of B and A \times 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) $M \times N S \% T$
- (3) $M \times S N \% T$
- (4) $M \times N \times S \% T$
- **71.** 1. B5D means B is the father of D.
 - 2. B9D means B is the sister of D.
 - 3. B4D means B is the brother of D.
 - 4. B3D means B is the wife of D.

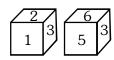
Which of the following means F is the mother of K?

- (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

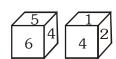
- If SPIDER is coded as PSDIRE, how is COMMON written in that code?
 - (1) OCMMNO
- (2) OCMMOO
- (3) OCMOON
- (4) OCMOMN

Directions(Q.74 to Q.76): All the six members of a family A, B, C, D, E & 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 C. D is the daughter of A. F is the brother of B.

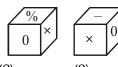
- How many male members are there in the family?
 - (1) 1
- (2) 2
- (3) 3
- (4) 4
- **75**. Who is the mother of B?
 - (1) D
- (2) F
- (3) A
- (4) E
- **76.** How many children does A have?
 - (1) 1
- (2) 3
- (3) 2
- (4) 4
- **77.** Which digit will appear on the face opposite to the face with number 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
- Which sign will be opposite to '+'?

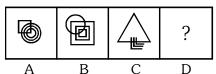


- (1) %
- (2) -
- $(3) \times$
- (4)\$

Directions(Q.80 to Q.87): Find out the alternative which 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. $M \times N : 13 \times 14 :: F \times R : ?$
 - $(1) 14 \times 15$
- (2) 5×17
- $(3) 6 \times 18$
- $(4) 7 \times 19$
- **85**. Conference: Chairman:: Newspaper:?
 - (1) Reporter
- (2) Distributor
- (3) Printer
- (4) Editor
- 86. Problem figures





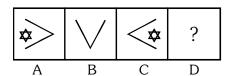








87. **Problem Figures**



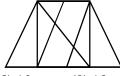




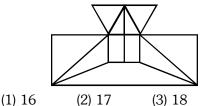




88. Find the number of tirangle in the figure below. Problem figure



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



(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 (x) as its part.

91.











92.











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 (x).

93.



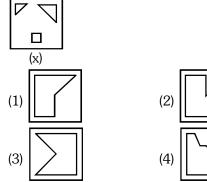






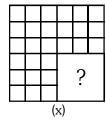


94.



Directions (Q.95) to Q.98: Identify the figure that completes the pattern (x).

95.



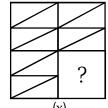








96.



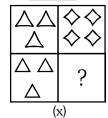








97.



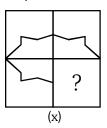








98.



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



Directions(Q.99 & Q.100): In these series, there are both letter pattern and number pattern. Fill the blank in series.

- **99.** ZA₅, Y₄B, XC₆, W₃D, ?
 - (1) E₇V
- (2) V_2E
- (3) VE₅
- (4) VE₇
- **100.** DEF, DEF₂, DE₂F₂, DE₂F₂, ?, $D_2E_2F_3$
 - (1) DEF₃
- (2) D₃EF₃
- (3) $D_2 E_3 F$
- (4) $D_2 E_2 F_2$

SPACE FOR ROUGH WORK