

Date: 05/11/2017

Max. Marks: 50

**SOLUTIONS**

Time allowed: 45 mins

**Direction - (Question 1 to 3) :** In each question below are given two statements followed by two conclusions numbered I and II, you have to assume every thing in the two statements to be true read the conclusion and then decide which of the given conclusions logically follows from the two given statements, give answer.

- (A) If only conclusion I follows  
 (B) If only conclusion II follows  
 (C) If Both conclusion I and II follows  
 (D) If neither conclusion I nor II follows

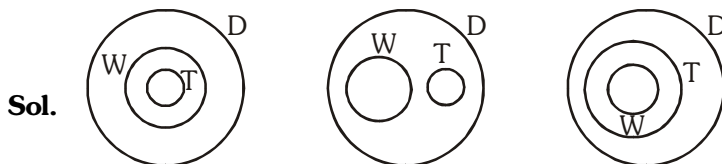
1. Statements : All water is divine

All temple are divine

Conclusions :-

- (I) All water is temple  
 (II) All temples are water

Ans. (D)

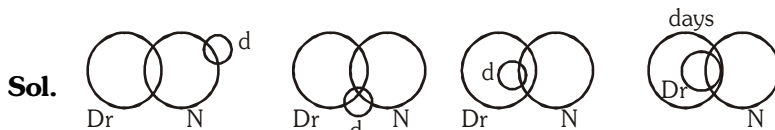


2. Statements :- Some drems are nights, some nights are days.

Conclusions:-

- (I) All days are either nights or drems.  
 (II) Some days are nights.

Ans. (B)

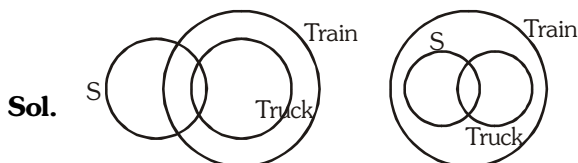


3. Statements :- Some Scooters trucks. All trucks are train.

Conclusions :

- (I) Some Scooters are train.  
 (II) No truck is a Scooters.

Ans. (A)



4. The number of boys in a class is three times the numbers of Girls which one of the following numbers can not represent the total number of Children in the class ?

- (A) 48 (B) 44 (C) 42 (D) 40

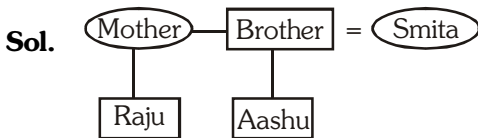
Ans. (C)

Sol. Total number of children are multiple of 4

5. Pointing to Raju, Smita said "His Mother's Brother is the Father of my Son Aashu" How is Raju related to Smita

- (A) Brother in law (B) Nephew (C) Uncle (D) Aunt

Ans. (B)



Direction :- (Q.No.6 to 8 ) In the following questions find the correct choice from the given 4 option in place of question mark (?)

6. XLP : COK :: MDV : ?

- (A) NVE (B) NWV (C) EWN (D) NWE

Ans. (A)

Sol. XLP : COK :: MOV : NEW  
Reverse Values

7. Needle : Clock :: Wheel : ?

- (A) Motor (B) Road (C) Vehicle (D) Driving

Ans. (C)

Sol. Wheel is part of vehicle

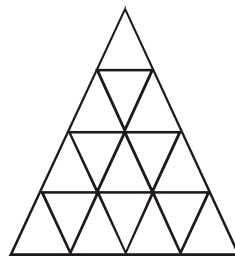
8. Coal : Heat :: Wax : ?

- (A) Energy (B) Candle (C) Light (D) Rire

Ans. (B)

Sol. Candle is made up of Wax

9. How many triangles are there in to following figure ?

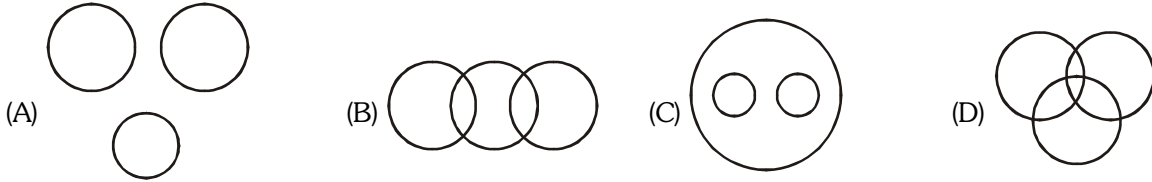


- (A) 25 (B) 26 (C) 27 (D) 28

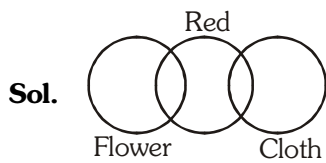
Ans. (C)

Sol.  $16 + 7 + 3 + 1 = 27$

10. Which of the following four logical diagrams represent correctly the relationship between flowers, Red colour and clothes.



Ans. (B)



11. If A means  $\div$ , 'B' means '-', 'C' means ' $\times$ ' and 'D' means '+' then  $20A5C8D8B10 =$

- (A) 0                                      (B) 4                                      (C) 30                                      (D) 14

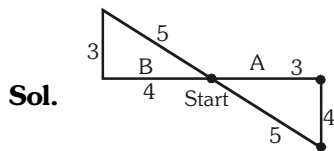
Ans. (C)

Sol.  $20 \div 5 \times 8 + 8 - 10 = 30$

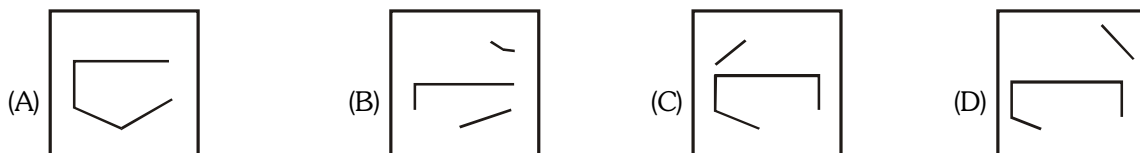
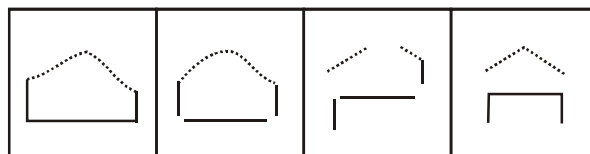
12. A and B start walking in opposite directions A covers 3 k.m. and B covers 4 k.m. Then A turns right and walk 4 k.m. which B turns left and walk 3 k.m. how far is each from the starting points

- (A) 10 km.                                      (B) 5 k.m.                                      (C) 8 k.m.                                      (D) 7 k.m.

Ans. (B)



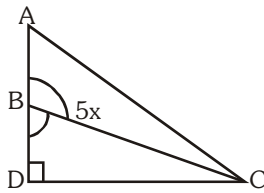
13. Which figure will come following sequence:



Ans. (D)

Sol. By observation

14. Which of the following could be value of x in the diagram :



- (A) 10 (B) 20 (C) 40 (D) 50

Ans. (B)

Sol. By observation

15. A Printer number the pages of a book starting with 1 and uses 3193 digit in all. How many pages does the book have

- 1075 (B) 1120 (C) 1595 (D) None of the above

Ans. (A)

Sol.  $1 - 9 = 9$  digit

$10 - 99 = 180$  digit

$100 - 999 = \underline{2700}$  digit  
2889

$$3193 - 2289 = \frac{304}{4} = 76$$

No. of pages =  $999 + 76 = 1075$

16. Fifty students were there in tenth class who took the mental ability test. Six of the students did not qualify, out of the remaining Ramesh ranked 14th from the last. What was his rank from top ?

- (A) 32 (B) 30 (C) 31 (D) None of above

Ans. (C)

Sol.  $50 - 6 = 44$  Qualify

Rank from top =  $44 - 14 + 1 = 31$

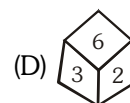
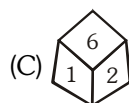
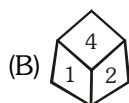
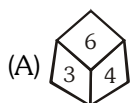
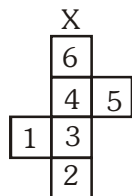
17. Find the odd one out :

- (A) DTFV (B) SBUD (C) KNMP (D) PKRL

Ans. (D)

Sol.  $\begin{matrix} \text{D} & \text{T} & \text{F} & \text{V} \\ \text{+2} & & & \\ \text{+2} & & & \end{matrix}$   $\begin{matrix} \text{S} & \text{B} & \text{U} & \text{D} \\ \text{+2} & & & \\ \text{+2} & & & \end{matrix}$   $\begin{matrix} \text{K} & \text{N} & \text{M} & \text{P} \\ \text{+2} & & & \\ \text{+2} & & & \end{matrix}$   $\begin{matrix} \text{P} & \text{K} & \text{R} & \text{L} \\ \text{+1} & & & \\ \text{+2} & & & \end{matrix}$

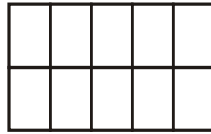
18. Select from the alternative the box that can be formed by folding the figure X.



Ans. (C)

Sol. By observation

19. How many rectangles are there in the following figure ?



- (A) 40 (B) 45 (C) 46 (D) 50

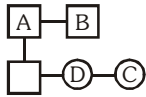
Ans. (B)

Sol. No. of rectangle =  $\frac{5 \times 6}{2} \times \frac{2 \times 3}{2} = 45$

20. A and B are brother, C and D are sister. A's son is D's brother, then how is B related to C :

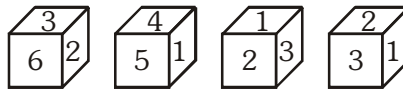
- (1) Father (2) Brother (3) Grandfather (4) Uncle

Ans. (D)



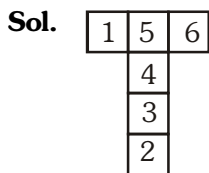
Sol.

21. From the given four position of a single dice, find the digit at the face opposite to face having digit 6:



- (A) 1 (B) 3 (C) 4 (D) 5

Ans. (A)



22. If  $526 = 9$  and  $834 = 9$  then  $716 = ?$

- (A) 20 (B) 9 (C) 12 (D) 15

Ans. (C)

Sol.  $5 + 6 - 2 = 9$

$8 + 4 - 3 = 9$

$7 + 6 - 1 = 12$

23. Find the missing term ?

A	M	B	N
R	C	S	D
E	U	F	?

- (A) G (B) R (C) T (D) V

Ans. (D)

Sol.

A	M	B	N
R	C	S	D
E	U	F	V

24. Find the missing term ?

14	9	12	20
4	9	8	10
12	13	7	20
3	3	11	?
20	42	19	40

(A) 2

(B) 8

(C) 12

(D) 14

Ans. (B)

Sol.  $14 \times 4 - 12 \times 3 = 20$

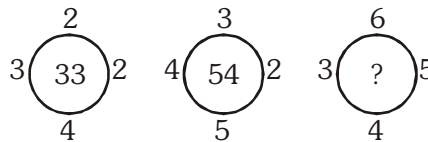
$9 \times 9 - 13 \times 3 = 42$

$12 \times 8 - 7 \times 11 = 19$

$20 \times 10 - 20 \times x = 40$

$x = 8$

25. Find the missing term ?



(A) 78

(B) 82

(C) 86

(D) 88

Ans. (C)

Sol. Sum of square of outer number

$$3^2 + 6^2 + 5^2 + 4^2 = 86$$

**Direction - (Q. 26 - 30)** A gold smith has Ring gold rings each having a different weight.

Statement (1) : Ring D weight twice as much as ring E.

Statement (2) : Ring E weight four and one half times as much as ring F.

Statement (3) : Ring F weight half as much as ring G.

Statement (4) : Ring G weight half as much as ring H.

Statement (5) : Ring H weight less than ring D but more then ring F.

Based on the above statements answer the following questions.

Sol. (Q.26 to Q.30) : Order  $D > E > H > G > F$

26. Which of the following represents the descending order of weight of rings.

(A) D,E,G,H,F

(B) D,E,H,G,F

(C) F,D,G,E,H

(D) E,G,H,D,F

Ans. (B)

27. Which of the numbered statement above is not necessary to determine the correct order of rings according to their weights:

(A) Statement (1)

(B) Statement (5)

(C) Statement (4)

(D) Statement (3)

Ans. (B)

Sol. Statement 5 is not required

28. Which of the following is lightest in weight ?

- (A) D (B) E (C) G (D) H

Ans. (C)

29. IF the rings are sold according to their weights, which ring will fetch highest value in rupees ?

- (A) G (B) F (C) H (D) D

Ans. (D)

30. Ring H is heavier then which of the following two rings ?

- (A) FG (B) GE (C) DF (D) DE

Ans. (A)

**Direction - (Q. 31-35) :** Study the following information and answer the questions given below.

J, K, L, M, N, O and P are seven kids playing in the garden. They are wearing clothes of black, blue, white, green, pink, yellow and brown colours, out of these seven three are girls, No girl is wearing either black, yellow or brown, M's sister is wearing pink, while he is wearing brown J is wearing blue, while his sister K is not wearing green, N is wearing yellow, while his best friend P is a boy.

**Sol. (Q.31-35) :**

J	K	L	M	N	O	P
---	---	---	---	---	---	---

  
Blue White Pink Brown Yellow Green Black

31. What colour is K wearing ?

- (A) Green (B) Pink (C) Brown (D) White

Ans. (D)

32. What colour is P wearing ?

- (A) Yellow (B) Blue (C) White (D) Black or Green

Ans. (D)

33. What colour is L wearing ?

- (A) Black of Green (B) Yellow (C) White (D) Blue

Ans. (NA)

34. What colour are sister of J and M wearing ?

- (A) Pink and Green (B) Pink and Yellow (C) White and Green (D) White and Pink

Ans. (D)

35. Which of the following groups represents only girls ?

- (A) KLN (B) JKO (C) KNO (D) KLO

Ans. (D)

**Direction - (Q. 36-40)** There is a number/letters series into following questions with an item missing, marked with question mark (?) Find the best appropriate option from the given option.

36. MHZ, NIW, OKT, PNQ, ?

- (A) RRN (B) QRN (C) QRM (D) QSN

Ans. (B)

**Sol.** M, N, O, P, Q

H, I, K, N, R  
+1 +2 +3 +4

Z, W, T, Q, N  
-3 -3 -3 -3

**37.** Y, B, T, G, O, ?

(A) N

(B) M

(C) L

(D) K

**Ans. (C)**

**Sol.** Y, B, T, G, O, L  
Pairs Pairs Pairs

**38.** 21, 25, 33, 49, 81, ?

(A) 97

(B) 121

(C) 129

(D) 145

**Ans. (D)**

**Sol.** + 4, + 8, + 16, + 32, + 64

**39.** 3, 20, 63, 144, 275, ?

(A) 354

(B) 468

(C) 548

(D) 554

**Ans. (B)**

**Sol.** 3, 20, 63, 144, 275, 468  
 $1 \times 3$   $4 \times 5$   $9 \times 7$   $16 \times 9$   $25 \times 11$   $36 \times 13$

**40.** 81, 41, 42,  $64\frac{1}{2}$ , ?, 330

(A) 131

(B)  $118\frac{1}{2}$

(C) 129

(D)  $105\frac{1}{2}$

**Ans. (A)**

**Sol.**  $81, 41, 42, 64\frac{1}{2}, 131, 330$   
 $+1 \times 0.5$   $+1 \times 1$   $+1 \times 1.5$   $+1 \times 2$

**41.** If D = 4, I = 9, DID = 36 and PBH = 34 then LCJ = ?

(A) 32

(B) 38

(C) 42

(D) 45

**Ans. (Bonus)**

**42.** If ARUNI is written as '37542' and LEBRAM is written as '168739' then how will 'BALMANI' be written in that language ?

(A) 8319432

(B) 8319342

(C) 831972

(D) None of the above

**Ans. (B)**

**Sol.** Direct coding



43. In a certain code language 'CHAT' is written as SUZBGIBD, How will 'APT' be coded in that language?

- (A) SUOBZQ (B) SUOZQB (C) SUOQBZ (D) SUOQZB

Ans. (D)

Sol.  $\begin{matrix} C & H & A & T \\ \wedge & \wedge & \wedge & \wedge \\ B & D & G & I \\ \wedge & \wedge & \wedge & \wedge \\ Z & B & S & U \end{matrix} \rightarrow$  Reverse SUZBGIBD

$\begin{matrix} A & P & T \\ \wedge & \wedge & \wedge \\ Z & B & O \\ \wedge & \wedge & \wedge \\ Q & S & U \end{matrix}$  SUOQZB

44. If in a certain code language 'KAMLESH' is written as 'GUJLMCO', then how will 'NATURAL' be written in that language ?

- (A) TCNUPCV (B) TCOUPVC (C) TCUOPVC (D) TCOUVCP

Ans. (A)

Sol.  $\text{K A M A L E S H} \xrightarrow{+2} \text{G U J L M C O}$

$\text{N A T U R A L} \xrightarrow{+2} \text{T C N U P C V}$

45. Read the following statements carefully and answer the questions.

- i. Ram scored more than Rani.
- ii. Rani scored less than Ratna.
- iii. Ratna scored more than Ram.
- iv. Padma scored more than Ram but less than Ratna.

Who scored the highest ?

- (A) Ram (B) Padma (C) Rani (D) Ratna

Ans. (D)

Sol. Ratna > Padma > Ram > Rani

**Direction - (Q. 46 to 50) :** Read the following information carefully and answer the question given below:

The outer border of with 1 cm of a cube with side 5 cm. is painted yellow on each side and the remaining space enclosed by this 1 cm. path is painted pink. This cube is now cut into 125 smaller cubes of each side 1 cm. the smaller cubes so obtained are now separated.

46. How many smaller cubes have all the surface uncoloured ?

- (A) 0 (B) 9 (C) 18 (D) 27

Ans. (D)

Sol.  $(5 - 2)^3 = 27$

47. How many smaller cubes have three surface coloured yellow ?

- (A) 2 (B) 4 (C) 8 (D) 10

Ans. (C)

Sol. All corners = 8

**48.** How many smaller cubes have atleast two surface coloured yellow?

(A) 24

(B) 44

(C) 48

(D) 96

**Ans. (B)**

**Sol.**  $36 + 8 = 44$

**49.** How many smaller cubes have one face coloured pink and in adjacent face yellow ?

(A) 0

(B) 1

(C) 2

(D) 4

**Ans. (A)**

**Sol.** By observation

**50.** How many smaller cubes have atleast one face coloured ?

(A) 27

(B) 98

(C) 48

(D) 121

**Ans. (B)**

**Sol.**  $125 - 27 = 98$

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