

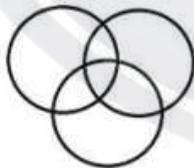
## 20

## Practice Set

1. If A denotes 'addition', B denotes 'multiplication', C denotes 'subtraction', and D denotes 'division', then what will be the value of the following expression?

66 A (132 D 12) C (4 A 3) B (15 D 5) A 16 B (-3)

- (a) 10 (b) 8  
(c) 6 (d) 56
2. In a certain code language 'ROUBST' is coded as 61. How will 'FORTUNATE' be coded in that language?  
(a) 141 (b) 142  
(c) 124 (d) 114
3. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.  
RSX, NQW, JOV, FMU, ?  
(a) BKT (b) BLT  
(c) DKS (d) CJS
4. Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.  
21 : 112 :: 36 : ? :: 51 : 272  
(a) 198 (b) 72  
(c) 192 (d) 252
5. Select the set of classes the relationship among which is best illustrated by the given Venn diagram.



- (a) Eatables, Plums, Fruits  
(b) Women, Gynecologists, Doctors  
(c) Males, Females, Daughters  
(d) Entrepreneurs, Women, Philanthropists
6. Select the option that is related to the third term in the same way as the second term is related to the first term.  
HARMONY : BMLGUDK :: RESOLVE : ?

- (a) VEOIVHU (b) EVOJHVU  
(c) OVEJUHV (d) VOEIUVH

7. Select the correct option that indicates the arrangement of the given words in a logical and meaningful order.

1. Core 2. Atmosphere  
3. Universe 4. Surface

5. Galaxy

- (a) 1, 4, 2, 5, 3 (b) 4, 3, 5, 2, 1  
(c) 1, 4, 2, 3, 5 (d) 1, 3, 4, 5, 2

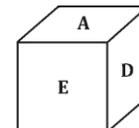
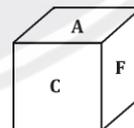
8. The average salary of the entire teaching staff in a college is Rs.2,000 per day. The average salary of the male teachers is Rs.2,500 and that of the female teachers is Rs.1,200. If the number of male teachers is 16, then find the number of female teachers in the college.

- (a) 18 (b) 14  
(c) 12 (d) 10

9. In a certain code, 6218 means 'Laptop is a computer' and 8217 means 'Computer is a machine'. Which of the following is the code for 'Machine makes our life easy'?

- (a) 58795 (b) 76834  
(c) 75344 (d) 75894

10. Six letters A, B, C, D, E and F are written on different faces of a dice. Two positions of the same dice are shown. Select the letter that will be on the face opposite to the face having the letter 'C'.



- (a) D (b) F  
(c) E (d) B

11. Select the number from among the given options that can replace the question mark (?) in the following series.

3, 11, 31, 69, 131, ?

- (a) 163 (b) 223  
(c) 198 (d) 152



12. 'A + B' means 'A is the daughter of B'.  
 'A \$ B' means 'A is the husband 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'.  
 If 'W @ S % K \$ G & U & T @ R + C', then which of the following statements is correct?  
 (a) C is the father-in-law of K.  
 (b) G is the father of W.  
 (c) G is the maternal grandmother of R.  
 (d) C is the wife of U.

13. If '@' means 'addition', '%' means 'multiplication', '\$' means 'division', and '#' means 'subtraction', then find the value of the following expression.

$$23 @ 105 \$ 15 \% 6 \# 29$$

- (a) 36 (b) 23  
 (c) 40 (d) 28

14. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

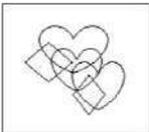
**Statements:** All boats are birds.  
 Some rats are boats.

**Conclusions:** I. Some rats are birds.  
 II. Some birds are boats.  
 III. All rats are bats.

- (a) Only conclusion I follows.  
 (b) Only conclusion II follows.  
 (c) Only conclusions I and II follow.  
 (d) Only conclusions I and III follow.

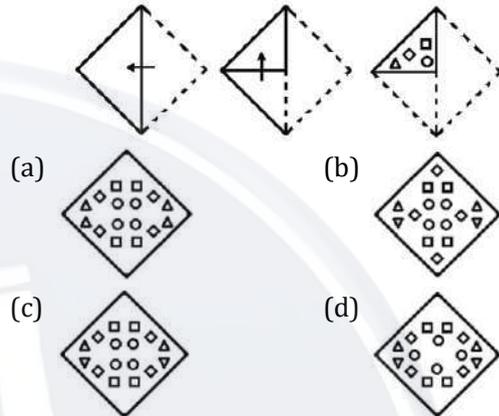
15. Select the option in which the given figure is embedded (rotation is NOT allowed).



- (a)  (b) 



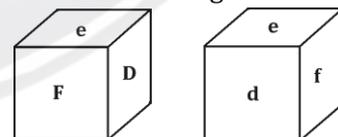
16. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



17. Nine employees, K, L, M, N, O, P, Q, R and S, are sitting in the office in a straight line, all facing the east. O is third to the right of M. K is third to the left of P. Q is between P and S. N is fourth to the right of M. P is to the immediate right of N. R is fourth to the left of O. Which of the following statements is NOT correct?

- (a) O is sitting between K and N.  
 (b) R and S are sitting at the corners.  
 (c) Q is sitting fourth to the right of K.  
 (d) L is sitting third to the left of O.

18. Six letters, D, d, E, e, F and f, are written on the different faces of a dice. Two positions of this dice are shown. Select the letter that will be on the face opposite to the face having the letter 'D'.



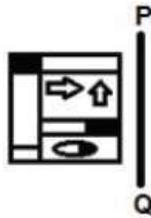
- (a) e (b) f  
 (c) d (d) E

19. Select the number from among the given options that can replace the question mark (?) in the following series.

$$58, 67, 83, 108, ?$$

- (a) 144 (b) 178  
 (c) 139 (d) 157

20. Select the correct mirror image of the given figure when the mirror is placed at 'PQ' as shown.



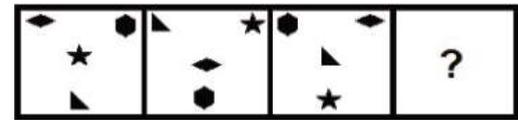
- (a)
- (b)
- (c)
- (d)

21. Study the given matrix carefully and select the number from among the given options that can replace the question mark (?) in it.

12	8	100
18	6	111
15	4	?

- (a) 78
- (b) 108
- (c) 102
- (d) 62

22. Select the figure from among the given options that can replace the question mark (?) in the following series.



- (a)
- (b)
- (c)
- (d)

23. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.

g \_ o \_ d k \_ m \_ f \_ o \_ k k \_ g f o \_ d \_ k m

- (a) f o k d o d m o k
- (b) f o k g o d f o k
- (c) f o k g o d m o m
- (d) f o k g o d m o k

24. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the one that is different.

- (a) GJM
- (b) LOQ
- (c) TWY
- (d) BEG

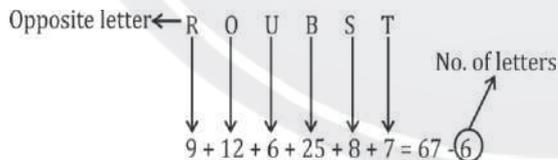
25. In a certain code language, if ESTEEM is written as HVWHHP, then how will DOCTOR be written in the same code language?

- (a) FQEVQT
- (b) GRFWRU
- (c) HSGXSV
- (d) GRGVST

## Solutions

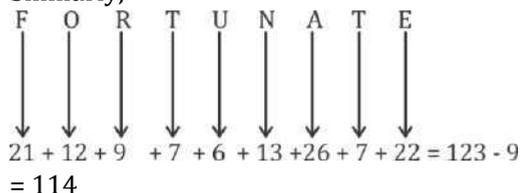
1. (b):  $66 + (132 \div 12) - (4 + 3) \times (15 \div 5) + 16 \times (-3)$   
 $\Rightarrow 66 + 11 - 21 - 48 \Rightarrow 77 - 69 = 8$

2. (d):



= 61

Similarly,



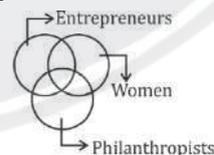
3. (a): -4, -2, -1 pattern follow.

4. (c):  $21 = 3 \times 7, 112 = 16 \times 7$

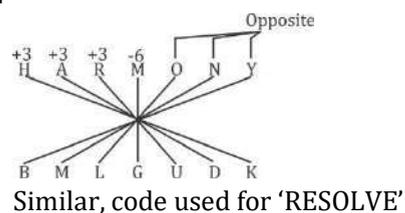
$51 = 3 \times 17, 272 = 16 \times 17$

Similarly,  $36 = 3 \times 12, 192 = 16 \times 12$

5. (d):



6. (a):



7. (a):

8. (d): Let the entire staff be x.  
 A.T.Q.  
 $2000 \times x = 2500 \times 16 + 1200 \times (x - 16)$   
 $2000x = 2500 \times 16 + 1200x - 1200 \times 16$   
 $800x = 16 \times (1300)$   
 $x = 26$   
 Female Staff =  $26 - 16 = 10$

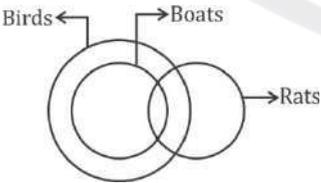
9. (c):  
 $6\ 2\ 1\ 8 = \text{Laptop is a computer}$   
 $8\ 2\ 1\ 7 = \text{Computer is a machine}$   
 Similarly,  
 Machine makes our life easy  $\Rightarrow 75344$

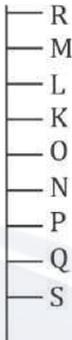
10. (c):  
 $B \begin{cases} A \rightarrow D \rightarrow E \\ A \rightarrow F \rightarrow C \end{cases}$

11. (b):  
 $3, 11, 31, 69, 131, ?(223)$   
 $8, 20, 38, 62, 92$   
 $+12, +18, +24, +30$   
 $+6, +6, +6$

12. (c):  
 $K^+ \text{ --- } G^-$   
 $\downarrow \quad \quad \downarrow$   
 $W^+ \text{ --- } S^+ \text{ --- } U^- \text{ --- } C^+$   
 $\quad \quad \quad \downarrow \quad \quad \downarrow$   
 $\quad \quad \quad T^+ \text{ --- } R^-$

13. (a):  $23 + 105 \div 15 \times 6 - 29$   
 $\Rightarrow 23 + 7 \times 6 - 29$   
 $\Rightarrow 23 + 42 - 29$   
 $\Rightarrow 65 - 29 = 36$

14. (c):  
  
 I. ✓  
 II. ✓  
 III. ✗

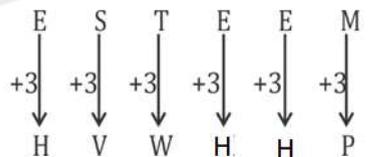
15. (a):  
 16. (c):  
 17. (d):  


18. (b):  
 $E \begin{cases} e \rightarrow D \rightarrow F \\ e \rightarrow f \rightarrow d \end{cases}$

19. (a):  
 $58, 67, 83, 108, ?(144)$   
 $9, 16, 25, 36$   
 $(3)^2, (4)^2, (5)^2, (6)^2$

20. (a):  
 21. (d): Row: (first Number  $\times$  Second number)  
 $+ 4 =$  Third number  
 Row: (first Number  $\times$  Second number)  
 $+ 3 =$  Third number  
 Row: (first Number  $\times$  Second number)  
 $+ 2 =$  Third number

22. (c):  
 23. (d):  $g\ f\ o\ o\ d\ k\ k\ m / g\ f\ o\ o\ d\ k\ k\ m / g\ f\ o\ o\ d\ k\ k\ m$   
 24. (a):  $+3, +2$ , Pattern follows except in 'GJM'

25. (b):  
  
 Similar code used for 'DOCTOR'.

