# 17 Practice Set

1. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter cluster.
   RJB : TGF :: QPG : ?
   (a) SMK   (b) SOJ
   (c) RMK   (d) TNJ

2. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.
   (a) QUYCG   (b) BFJNR
   (c) KOSWA   (d) VZDHN

3. Select the number from among the given options that can replace the question mark (?) in the following series.
   61, 99, 152, 222, 312, ?
   (a) 426   (b) 452
   (c) 412   (d) 398

4. Select the correct combination of mathematical signs that can sequentially replace the * signs and make the given equation correct.
   88 * 120 * 42 * 240 * 48 * 2
   (a) +, ÷, –, =, ×   (b) =, –, +, ÷, ×
   (c) ×, ÷, =, –, +   (d) =, ×, +, ÷, –

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


   (a)   (b)

   (c)   (d)

6. The sequence of folding a piece of paper (figures i and ii) and the manner in which the folded paper has been cut (figure iii) is shown in the following figures. Select the option that would most closely resemble the unfolded form of figure (iii).

   (a)   (b)

   (c)   (d)
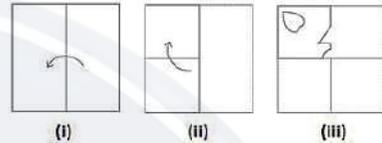
7. Five years ago, the ratio of the ages of Tarun and Saurabh was 4: 1. After five years, the ratio of their ages will be 2: 1. What is the present age (in years) of Saurabh?
   (a) 10   (b) 8
   (c) 12   (d) 14

8. In a certain code language, 'FLASK' is written as 'IPFYR'. How will 'TOURS' be written in that language?
   (a) WSYYZ   (b) WTZXZ
   (c) WSZXZ   (d) WRZXY

9. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.
   CAF, HEJ, SIQ, XMU, CQF, ?
   (a) MUJ   (b) TUK
   (c) MUU   (d) HUJ

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

(a)
(b)
(c)
(d)
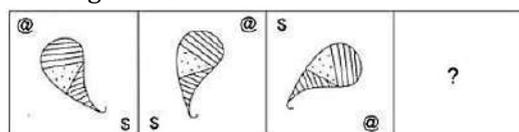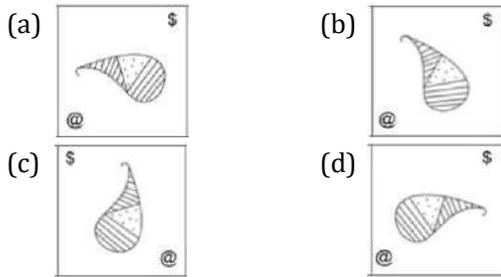
11. In a certain code language, 'ONION' is coded as 201 and 'POTATO' is coded as 261. How will 'MANGO' be coded in that language?
(a) 178
(b) 208
(c) 228
(d) 150

12. 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: Some pencils are pens.
                     All pens are papers.
                     All pencils are colours.

Conclusions: I. All colours are pens.
                     II. Some colours are pencils.
                     III. Some papers are pens.

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

13. In a certain code language, 'first of all' is written as 'kan dan san', 'who is first' is written as 'zan kan ven', and 'this is pale' is written as 'ven gen len'. How will 'who' be written in that language?
(a) zan
(b) yen
(c) gen
(d) kan

14. Select the option that is related to the third number in the same way as the second number is related to the first number.
68 : 19 : : 164 : ?
(a) 45
(b) 43
(c) 41
(d) 39

15. Which two numbers need to be interchanged to make the following equation correct?
7 + 56 ÷ 8 × 2 – 13 = 11
(a) 7 and 8
(b) 8 and 2
(c) 7 and 13
(d) 7 and 2

16. A cube of side 49 cm is painted purple on all the faces and then cut into smaller cubes of sides 7 cm each. Find the number of smaller cubes having only one face painted.
(a) 100
(b) 25
(c) 50
(d) 150

17. Seven friends, E, F, G, H, I, J and K, are sitting along a circular table facing towards the centre. F and I are sitting to the immediate left and right of G, respectively. H is sitting third to the left of G. E and I are the neighbours of J. Who is sitting to the immediate right of H?
(a) H
(b) E
(c) F
(d) K

18. Select the Venn diagram that best represents the relationship between the following.
Noncommunicable diseases, Cataract, Diabetes, Measles
(a)
(b)
(c)
(d)
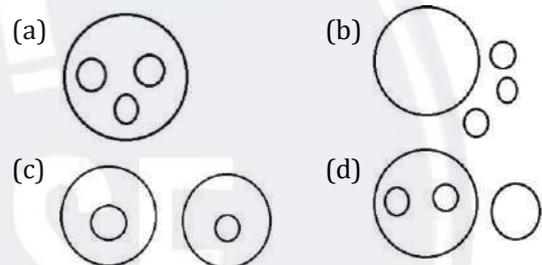
19. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.
r _ k n _ c _ _ h _ _ b c b t _ k _ b c b
(a) h c b s k n b n
(b) h b c q k n h n
(c) h b b s k n h n
(d) h b b s k n h c

20. Study the given pattern carefully and select the number that can replace the question mark (?) in it.

15	9	144
18	12	?
22	17	195

(a) 188
(b) 180
(c) 224
(d) 255

21. Mahesh is the father of Riva and paternal grandfather of Vansh. Aakash is the brother of Riva and father of Vansh and Ritu. Ritu is the only daughter of Aakash and Maya. How is Maya related to Mahesh?
(a) Aunt
(b) Daughter-in-law
(c) Daughter
(d) Sister

22. Select the option that is NOT embedded in the given figure (X) (rotation is NOT allowed).

(X)
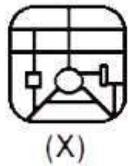
(a)

(b)

(c)

(d)

23. Select the number from among the given options that can replace the question mark (?) in the following series.
298, 217, 168, 143, ?

(a) 134　　　　　　　(b) 138
(c) 128　　　　　　　(d) 112

24. Sahasra started running from her house towards the north. After 40 meters she turned left and ran for 75 meters. She then turned right and ran for 30 meters, and again turned right to run 75 meters. In which direction was she running finally?
(a) North　　　　　　(b) West
(c) South　　　　　　(d) East

25. Select the correct option that indicates the arrangement of the given words in a logical and meaningful order.
1. Treatment　　　　　2. Recovery
3. Virus　　　　　　　4. Symptoms
5. Infection
(a) 2, 5, 1, 4, 5　　　　(b) 4, 5, 3, 1, 2
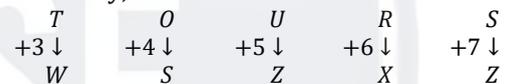(c) 3, 5, 4, 2, 1　　　　(d) 3, 5, 4, 1, 2

Solutions

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

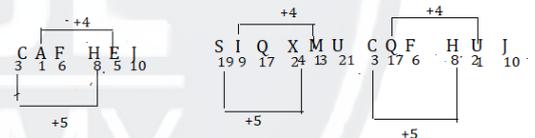**2. (d):** Except (d), all follow +4 Pattern.

3. (a):

61, 99, 152, 222, 312, ? (426)
　38　53　70　90　114
　　15　17　20　24
　　　+2　+3　+4
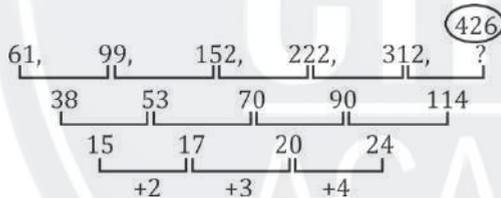
4. (b): $88 = 120 - 42 + 240 \div 48 \times 2$
$88 = 120 - 42 + 5 \times 2$
$88 = 130 - 42 \Rightarrow 88 = 88$

5. (d):

6. (a):

7. (a): Let the age of Tarun and Saurabh be 4x and x.
$$\frac{4x+10}{x+10} = \frac{2}{1}$$
$4x + 10 = 2x + 20$
$2x = 10 \Rightarrow x = 5$
Present age of Saurabh = 5 + 5 = 10 years

8. (c):

F	L	A	S	K
+3↓	+4↓	+5↓	+6↓	+7↓
I	P	F	Y	R

Similarly,

T	O	U	R	S
+3↓	+4↓	+5↓	+6↓	+7↓
W	S	Z	X	Z

9. (d): The pattern is

C A F　H E I
3 1 6　8 5 10

S I Q　X M U　C Q F　H U J
19 9 17　24 13 21　3 17 6　8 21 10

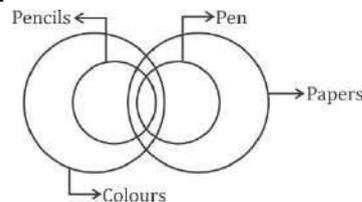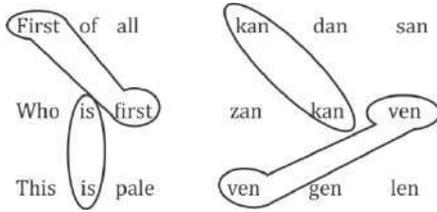**10. (a):**

11. (d): O　N　I　O　N
↓　↓　↓　↓　↓
15　14　9　15　14
$= (15 + 14 + 9 + 15 + 14) \times 3 = 201$
Similar, Code be used for 'MANGO'
$(13+1+14+7+15) \times 3 = 150$

12. (d):

Pencils ← → Pen
→ Papers
→ Colours

I.　×
II.　✓
III.　✓

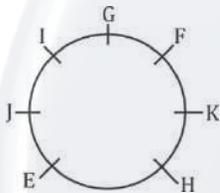**13. (a):**

14. (b): $19 \times 4 - 8 = 68$
Similarly,
$43 \times 4 - 8 = 164$

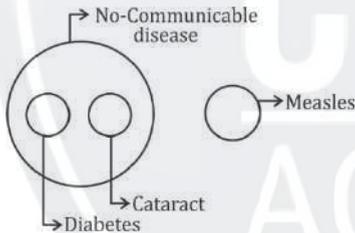**15. (a):** $8 + 56 \div 7 \times 2 - 13 = 11$
$8 + 8 \times 2 - 13 = 11$
$24 - 13 = 11$
$11 = 11$

16. (d): Cube of one side painted $= 6(n - 2)^2$
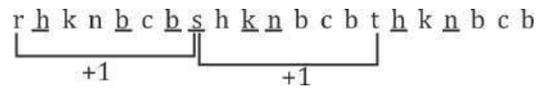$= 6(7 - 2)^2 = 6 \times 25 = 150$
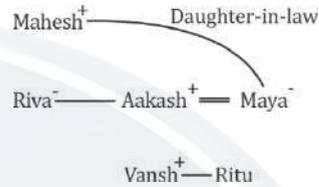
17. (d):

18. (d):

19. (c):

20. (b): In row,
$(1^{st}$ Number $)^2 - (2^{nd}$ Number$)^2 = 3^{rd}$ Number
$(18)^2 - (12)^2$
$= 324 - 144 = 180$

21. (b):

22. (d):

23. (a):

24. (d):

25. (d):

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