

14

Practice Set

1. In a certain code language, 'TANKER' is written as 'VCPMGT', how will 'SOCRATES' be written in that language?

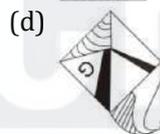
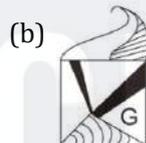
(a) UQETCVGU (b) UQETCWGU
(c) UQFTCVHU (d) UQGTCVHU

2. Which two signs need to be interchanged to make the following equation correct?

$$23 + 84 \div 14 \times 8 - 3 = 5$$

(a) \div and $-$ (b) $-$ and $+$
(c) $+$ and \times (d) $-$ and \times

3. Which of the option figures when rotated 270° anticlockwise and then 45° clockwise will result in the given question figure?



4. Seven friends, Subhi, Prince, Ketan, Vishal, Mahima, Krish and Naitik, are sitting around a circular table with their backs towards the centre. Subhi is sitting to the immediate right of Prince. Naitik and Krish are not sitting to the immediate left or right of Vishal. Vishal is sitting third to the left of Prince. Mahima is sitting to the immediate right of Vishal. Who is sitting third to the right of Prince?

(a) Naitik (b) Krish
(c) Ketan (d) Mahima

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

18	24	19
7	8	9
8	11	14
17	?	14

(a) 38 (b) 30
(c) 15 (d) 21

6. 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) CJQY (b) MTAH
(c) DKRY (d) HOVC

7. In a certain code language, 'PARK' is coded as '3749', and 'RACE' is coded as '4762'. How will 'CARE' be coded in that language?

(a) 6742 (b) 7642
(c) 6724 (d) 7624

8. 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 from the statements.

Statements:

1. All flowers are blue.
2. All blue are good.
3. No good is red.

Conclusions:

- I. No red is a flower.
- II. No red is a blue.
- III. Some good are flowers.
- IV. Some good are blue.

(a) Only conclusions I and III follow
(b) Only conclusions I, III and IV follow
(c) Only conclusions I, II and IV follow
(d) All conclusions I, II, III and IV follow

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

j _ m b _ a _ _ u _ b _ a d j _ m _ b _ d

(a) u b d j m b j b a (b) u b d j m b u b a
(c) u b m j m b u b a (d) u b d j m b u m a

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

1. Chapterlist 2. Bibliography
3. Preface 4. Cover page
5. Chapters

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



11. A cube of side 80 cm is painted yellow on all the faces and then cut into smaller cubes of sides 8 cm each. Find the number of smaller cubes having all the three faces painted.

- (a) 32 (b) 64
(c) 28 (d) 8

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

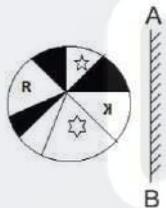
82, 105, 136, 177, 224, 283, ?

- (a) 349 (b) 412
(c) 320 (d) 350

13. There are seven members, B, C, D, E, F, G and H, in a family. H is the only daughter-in-law of D. E is the sister of C. C is the only son of F, who is the wife of D. B and G are the sons of H. How is G related to F?

- (a) Grandson (b) Brother
(c) Son (d) Father

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



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

15. In a certain code language, 'so it be' is written as 'lor kor nor', 'it is done' is written as 'zor kor tor', and 'be yourself' is written as 'nor xor'. How will 'so' be written in that language?

- (a) xor (b) nor
(c) lor (d) kor

16. Among five boxes A B C D and E, B is thrice as heavy as A. C is 40 kg heavier than E. D is three and a half times as heavy as E and C is five times as heavy as A. The weight of E is 40 kg. Which object is the lightest of all and what is its weight?

- (a) B 12 kg (b) D 125 kg
(c) B 50 kg (d) A 16 kg

17. Select the set of classes the relationship among which is best illustrated by the given Venn diagram.



- (a) Peso, Currency, Taka
(b) Potato, Peach, Vegetables
(c) Natural numbers, Integers, Real numbers
(d) Doctors, Singers, Extroverts

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

28, 32, 41, 57, ?

- (a) 74 (b) 82
(c) 90 (d) 68

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



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

20. Select the option that is related to the third term in the same way as the second term is related to the first term.

UPRIGHT : PUVKTH :: DESTROY : ?

- (a) DEWPVOY (b) EDPXNYO
(c) EDWWUY (d) EDWPVYO

21. 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.

3 : 17 :: 6 : ? :: 9 : 47

- (a) 36 (b) 34
(c) 38 (d) 32

22. Select the correct combination of mathematical signs that can sequentially replace the * signs and make the given equation correct.

$$88 * 120 * 42 * 240 * 48 * 2$$

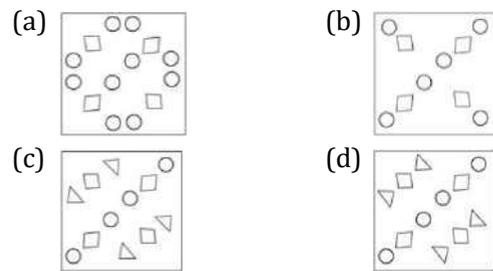
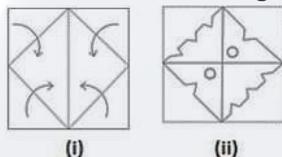
- (a) $\times, \div, =, -, +$ (b) $+, \div, -, =, \times$
 (c) $=, \times, +, \div, -$ (d) $=, -, +, \div, \times$

23. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.

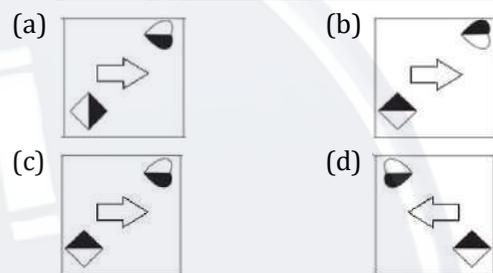
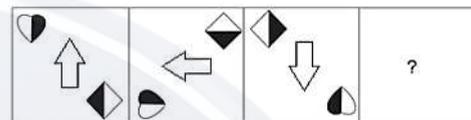
FCC, UFH, OIS, LLX, FOC, ?

- (a) VSG (b) WTH
 (c) URH (d) TRF

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

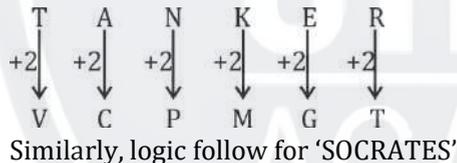


25. Select the figure from among the given options that can replace the question mark (?) in the following series.



Solutions

1. (a):



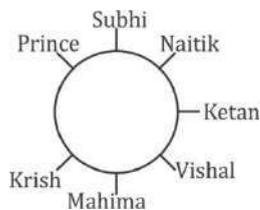
2. (d): $23 + 84 \div 14 - 8 \times 3 = 5$

$$23 + 6 - 24 = 5$$

$$5 = 5$$

3. (c):

4. (c):



5. (d): In column

$$1^{\text{st}} \text{ Number} + 2^{\text{nd}} \text{ number} - 3^{\text{rd}} \text{ number} = 4^{\text{th}} \text{ number}$$

6. (a):

$$(a) C \xrightarrow{+7} J \xrightarrow{+7} Q \xrightarrow{+8} Y$$

$$(b) M \xrightarrow{+7} T \xrightarrow{+7} A \xrightarrow{+7} H$$

$$(c) D \xrightarrow{+7} K \xrightarrow{+7} R \xrightarrow{+7} Y$$

$$(d) H \xrightarrow{+7} O \xrightarrow{+7} V \xrightarrow{+7} C$$

7. (a):

P	A	R	K	
↓	↓	↓	↓	← Coded as
3	7	4	9	

And

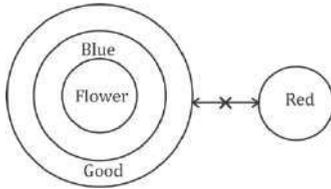
R	A	C	E	
↓	↓	↓	↓	← Coded as
4	7	6	2	

Similarly,

C	A	R	E	
↓	↓	↓	↓	← Coded as
6	7	4	2	



8. (d):



- I. ✓
- II. ✓
- III. ✓
- IV. ✓

9. (b): J u m b h a d / J u m b h a d / J u m b h a d

10. (c):

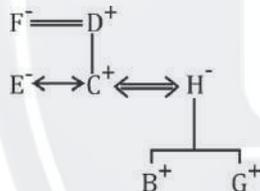
11. (d): All corner cubes are painted on three sides, there are 8 corners in cubes. So, Cubes with point on 3 sides = 8.

12. (d):



Alternate prime number is added.
 Prime Numbers = 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67

13. (a):



(+) Represent male and (-) Represents female.

14. (d):

15. (c): So it be Lor Kor Nor
 it is done Zor Kor Tor
 be yourself Nor Xor
 'be' is coded as Nor, and 'it' is coded as 'Kor'.
 Then, 'So' is coded 'Lor'.

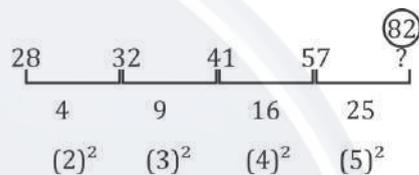
16. (d): Given, E = 40 kg
 C = E + 40 kg
 B = 3A, D = $\frac{3}{2}$ E and C = 5A

Now,
 C = E + 40 = 40 + 40 = 80 kg
 $A = \frac{C}{5} = \frac{80}{5} = 16$ kg
 B = 3A = 3 × 16 = 48 kg
 $D = \frac{3}{2}E = \frac{3}{2} \times 40 = 60$ kg
 Lightest weight = 16 kg, A

17. (a):



18. (b):



19. (a):

20. (d):

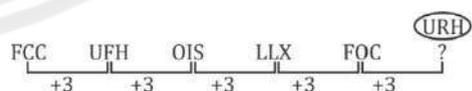


Similarly, code is used for 'DESTORY'

21. (d): $3 \times 5 + 2 = 17$
 $9 \times 5 + 2 = 47$
 Similarly,
 $6 \times 5 + 2 = 32$

22. (d): $88 = 120 - 42 + 240 \div 48 \times 2$
 $88 = 120 - 42 + 5 \times 2$
 $88 = 120 - 42 + 10$
 $88 = 130 - 42$
 $88 = 88$

23. (c):



24. (c):

25. (c):

