03 Practice Set
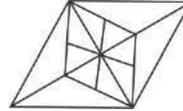
1. Select the correct combination of mathematical signs that can sequentially replace the signs balance the given equations
65 * 5 * 45 * 2 * 30 * 73
(a) ÷, ×, +, -, =
(b) +, ÷, ×, =, -
(c) ÷, +, ×, =, -
(d) ÷, +, ×, -, =

2. Select the option in which the number one related in the same way as are the numbers of the following set.
(36, 10, 1352)
(a) (29, 8, 882)
(b) (13, 4, 552)
(c) (14, 3, 293)
(d) (39, 8, 1661)

3. Four number-pars have been given, out of which three are alike in some manner and one is different. Select the number pair that is different.
(a) 15 : 675
(b) 13 : 507
(c) 9 : 244
(d) 11 : 363

4. Select the option figure that is embedded in the given figure

(a)　(b)　(c)　(d)

5. Read the given statements and conclusion carefully. Assuming that the information given in the statement is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion logically follow from the statements.
Statement :
All teachers are students.
No Students is Principal.
All Engineers are teachers.
Conclusion :
I.   No Engineer is Principal.
II.   Some Student are Engineers.
III. No teacher is a Principal.
(a) All the conclusion follows.
(b) Only conclusion I and II follow.
(c) Only conclusion III and II follow.
(d) Only conclusion II follow.

6. Select the Venn diagram that best illustrates the relationship among following classes.
Musicians, Males, Sons.
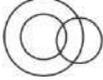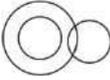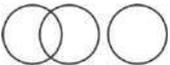
(a)　　　　(b)
(c)　　　　(d)

7. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series,
f _ ma _ e _ e _ _ le _ em _ l _ f _ m _ le
(a) e, l, f, m, a, f, a, e, a
(b) e, l, f, m, a, f, a, e, e, a
(c) f, l, m, a, f, e, a, m, l, e
(d) e, l, f, m, a, f, a, e, a, e

8. Select the figure among the given options that can replace the questions marks (?) in the following series.
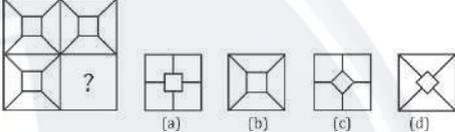
[a]　[b]　[c]　[d]

9. Select the option that is related to the fourth number in the same ways as the first number is related to the second number and the fifth number is related to the sixth number.
18 : 328 : : ? : 445 : : 22 : 488
(a) 21
(b) 20
(c) 28
(d) 24

10. Three different positions of the same dice are shown. Select the letter / number that will be on the face opposite to the face having the letter 'U' :

(a) I
(b) A
(c) E
(d) 9

11. Select the number from among the given options that can replace the question mark(?) in the following series.
8.5, 19, 36, 74 ?
(a) 154
(b) 146
(c) 152
(d) 160

12. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.
1.   Painkiller Parking
2.   Passion
3.   Positivity
4.   Pancreas
(a) 2, 5, 1, 4, 3
(b) 1, 5, 2, 4, 3
(c) 1, 5, 4, 3, 2
(d) 1, 5, 2, 3, 4

13. In a certain code language, 'COOMEN' is coded as '291' and 'FIX' is coded as '42'. How will 'PROFANE' be coded in that language.
(a) 342
(b) 345
(c) 329
(d) 333

14. Four words have been given, out of which three are like in some manner and one is different. Select the word that is different.
   (a) Growth   (b) Development
   (c) Expansion   (d) Insurance

15. Select the option in which the number one related in the same way as are the numbers of the following set.
   (35, 14, 441)
   (a) (34, 25, 81)   (b) (24, 25, 35)
   (c) (21, 45, 441)   (d) (95, 101, 49)

16. Select the letter-cluster from among the given options that can replace question mark(?) in the following series.
   HDOE, GFLI, FHIM, EJFQ _____?
   (a) ELCU   (b) DLCE
   (c) DLCUC   (d) DLCU

17. The average age of Ram, Shayam and Krishna 10 years from now will be 33 years. Seven years from now, Ram will be as old as Shayam was 4 years ago. If Krishna was born 2 years ago. What is the present age of Ram ?
   (a) 30 years   (b) 31 years
   (c) 29 years   (d) 28 years

18. Select the option that is related to the third word in the same way as the second word is related to the firs word.
   Dearth : Scarcity : : Substitute : ?
   (a) Rumor   (b) Assume
   (c) Replace   (d) Destroy

19. Select the option in which the words the same relationship as the shared by the given pair of words.
   Angle : Radians
   (a) Work : Joule   (b) Ampere : Current
   (c) Force : Watt   (d) Angle : Joule

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

21. Find the number of triangles in the given figure.
   (a) 15   (b) 24
   (c) 21   (d) 28

22. In a certain code language, ELEPHANT is written as DKDOIBOU. How will MONKEY be written in that language?
   (a) LLNMFZ   (b) LNLMFZ
   (c) LNMLZF   (d) LNMLFZ

23. 'P 8 Q' means 'P is the father of Q'
   'P 7 Q' means 'P is the sister of Q'
   'P 6 Q' means 'P is the brother of Q'
   'P 2 Q' means 'P is the wife of Q'
   Which of the following expressing represents 'A is the mother of B'?
   (a) A 8 M 2 B   (b) A 7 M 6 0 2 B
   (c) A 2 M 8 0 2 B   (d) A 2 M 8 B

24. Select the correct mirror image of the given combination when the mirror is placed to 'PQ' as shown

   58T3HZ8 |

   (a) 8ƧHƐT85   (b) 8ƧHET85
   (c) 8ƧHƐT8Ƨ   (d) 58T3Ƨ5

25. 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.
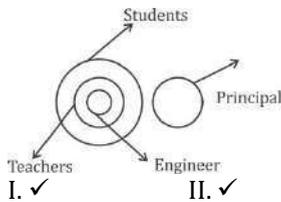   (a) PQRS   (b) LMNP
   (c) BCDE   (d) IJKL

Solutions

1. **(d):** $65 ÷ 5 + 45 × 2 – 30 = 73$
   $⟹ 13 + 90 – 30 = 73$
   $⟹ 103 – 30 = 73$
   $73 = 73$

2. **(a):** $36 – 10 = (26)^2 × 2 = 1352$
   $29 – 8 = (21)^2 × 2 = 882$

3. **(c):** (a) $15 ⟹ (15)^2 × 3 = 675$
   (b) $13 ⟹ (13)^2 × 3 = 507$
   (c) $9 ⟹ (9)^2 × 3 = 243$
   (d) $11 ⟹ (11)^2 × 3 = 363$

4. **(d):** Clearly, the question figure is embedded in figure (d) only.

5. (a):

I. ✔   II. ✔   III. ✔
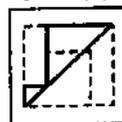
6. (a):
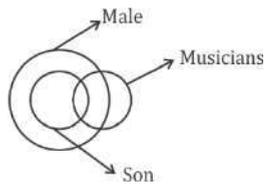
7. (b): f e̲ m a l̲ e / f e̲ m̲ a l e / f̲ e m a̲ l e / f e̲ m a̲ l e

8. (b):

9. (a): ⟹ $(18)^2 + 4 = 328$
⟹ $(21)^2 + 4 = 445$
⟹ $(22)^2 + 4 = 488$

10. (c): Ist dice ⟹ I → E → A
IIIrd dice ⟹ I → U → 9

11. (b):

8.5   19   36   74   146
×2+2 ×2-2 ×2+2 ×2-2

12. (d): 1, 5, 2, 3, 4

13. (a):

3 15 15 13 5 14
C   O   O   M E N   3 Vowels

Opposite

X   L   L   N   V   M
24 12 12 14 22 13   Vowels

$(24 + 12 + 12 + 14 + 22 + 13) \times 3$
$= 97 \times 3 = 291$

6   9   24
F   I   X   1 Vowels

Opposite

U   R   C
21 18 3

$(21 + 18 + 3) \times 1 = 42$
similarly

16 18 15 6   1 14 5
P   R   O   F   A   N   E   3 Vowels

Opposite

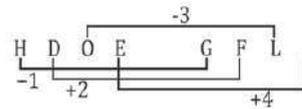K   I   L   U   Z   M   V
11 9 12 21 26 13 22
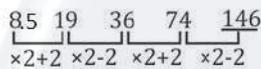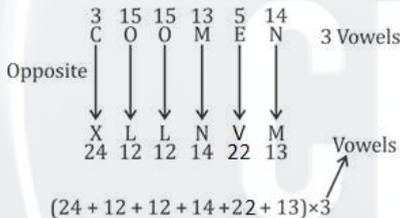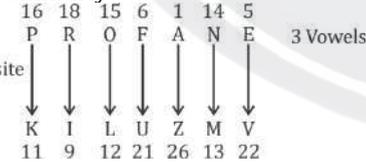
$(11 + 9 + 12 + 21 + 26 + 13 + 22) \times 3 = 342$

14. (d): Growth, Development & Expansion are Synonymous.
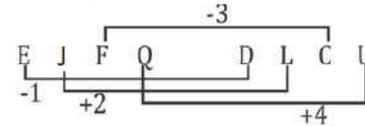
15. (a): $35 – 14 = 21 = (21)^2 = 441$
$34 - 25 = 9 = (9)^2 = 81$

16. (d):

similarly

17. (d): Ram + 7 = Shayam - 4
Shayam = Ram + 11
Krishna = 2 years
The average of, Ram, Shayam and Krishna 10 years from now will be 33.
So, present age = $\frac{Ram + Shayam + Krishna}{3} = 23$
Ram + Shayam + Krishna = 69
Now by substituting the above values.
Ram + Ram + 11 + 2 = 69
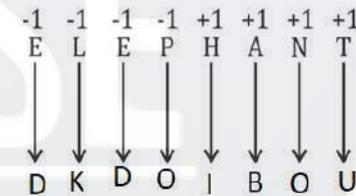Ram = 28 years

18. (c): Dearth is synonymous of scarcity, similarly substitute is synonymous of replace.

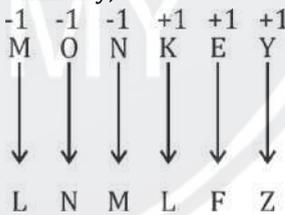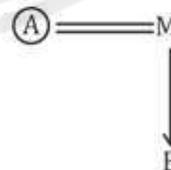**19. (a):** Angle is measured in radians whereas work is measured in Joule.

20. (d):

21. (d):

22. (d):

-1 -1 -1 -1 +1 +1 +1 +1
E   L   E   P   H   A   N   T

D   K   D   O   I   B   O   U

Similarly,
-1 -1 -1 +1 +1 +1
M   O   N   K   E   Y

L   N   M   L   F   Z

23. (d): By option

24. (c):

25. (b): All except 'LMNP' have four consecutive letter.