Direction: There is a number series following a pattern. One place is left blank. Find the correct answer from the given options Questions (1-5).

1. 16, 33, 65, 131, ___, 523
   (1) 613  (2) 261  (3) 521  (4) 262
   Ans. (2)
   Sol. \(x^2 + 1, x^2 - 1, x^2 + 1, \ldots\)

2. 15, 17, 32, 49, 81, 130, ___,
   (1) 211  (2) 226  (3) 179  (4) 194
   Ans. (1)
   Sol. Sum of consecutive number.
       15 + 17 = 32, 17 + 32 = 49
       \(\therefore\) Answer 81 + 130 = 211

3. 28, 33, 31, 36, ___, 39
   (1) 40  (2) 38  (3) 32  (4) 34
   Ans. (4)
   Sol. + 5, -2, + 5, -2, ___.
       \(\therefore\) Answer = 36 - 2 = 34

4. 62, 64, 30, 32, 14, 16, ___,
   (1) 12  (2) 6  (3) 18  (4) 13
   Ans. (2)
   Sol. \[\begin{array}{ccc}
   62 & 64 & 30 \\
   +2 & +2 & +2
   \end{array}\]
       \(\therefore\) Answer = 6 - 2

5. 38, 62, 74, 102, ___,
   (1) 124  (2) 104  (3) 102  (4) 120
   Ans. (3)
   Sol. \[\begin{array}{ccc}
   38 & 62 & 74 \\
   3 \times 8 & +6 \times 2 & +7 \times 4
   \end{array}\]
       \(\therefore\) Answer = 102 + 1 \times 0 \times 2 = 102
Direction - In question (6-10) find the odd term/wrong term or which is different from the rest three terms.

6. (1) 31 : 96  (2) 15 : 63  (3) 22 : 91  (4) 23.95
   Ans. (1)
   Sol. (1st number) × 4 + 3 = 2nd Number
       ∴ Answer = 1st option

7. (1) DFGE  (2) KMNL  (3) PRSQ  (4) UXWV
   Ans. (4)
   Sol. DF GE
       But 4th option doesn’t satisfies
       ∴ Answer = 4th option

8. (1) (2,8,18)  (2) (7,8,24)  (3) (3,9,21)  (4) (5,7,19)
   Ans. (2)
   Sol. 1st no + 2 (2nd no) = 3rd no.

9. (1) CGTX  (2) QJUF  (3) BFUY  (4) DPKW
   Ans. (2)
   Sol. All other options = alphabets in increasing order

10. (1) 65  (2) 344  (3) 730  (4) 101
    Ans. (4)
    Sol. All other options → Perfect Cubes + 1

Direction: In questions (11-13) the letters/numbers follow a definite pattern. Find the missing letter/number to complete the pattern.

11. — bcc _ ac_aabb_ab_cc
    (1) bacab  (2) bcaca  (3) aabca  (4) abaca
    Ans. (1)
    Sol. Pattern : b b c c a a / c c a a b b / a a b b c c
    ∴ Answer : 1st option

12. gfe__eg_e22_ie2__gf__22
    (1) e2g2  (2) 2fg2g  (3) e2g2e  (4) 2lg2e
    Ans. (4)
    Sol. Pattern : gfe22/gfe22/gfe22

13. 00___0_1_0_0__1
    (1) 10010  (2) 01011  (3) 01100  (4) 00111
    Ans. (1)
Sol. Pattern : 001/001/001/001

Direction : In question (14-16) : Developing relationship among items on the left side of sign :: find relationship on the rights side of sign :: by choosing from alternatives

14. 18:48 :: 100 :: ?
   (1) 160  (2) 180  (3) 120  (4) 144
   Ans. (2)

Sol. 2 × 3² : 3 × 4² : 4 × 5² : 5 × 6²
   ∴ Answer = 180

15. JOB : JOKE :: ROB : ?
   (1) ROBE  (2) RODE  (3) ROAL  (4) ROSE
   Ans. (4)

Sol. Best option : Rose

16. Tagore : Poetry :: Picasso : ?
   (1) Art  (2) Literature  (3) Painting  (4) Architecture
   Ans. (3)

Sol. Picasso related to painting

Direction : In question (17-23) find the missing term that will come in place of question mark.

17.  
   \[
   \begin{array}{ccc}
   372 & 580 & 918 \\
   235 & 405 & 735 \\
   274 & 350 & \quad \\
   \end{array}
   \]
   (1) 366  (2) 345  (3) 482  (4) 432
   Ans. (1)

Sol. 2 (918 – 735) = 2 (183) = 336

18. 
   \[
   \begin{array}{ccc}
   4 & 6 & ? \\
   7 & 108 & 3 \\
   2 & 63 & 113 \\
   8 & 3 & \quad \\
   \end{array}
   \]
   (1) 68  (2) 36  (3) 54  (4) 72
   Ans. (4)

Sol. \(2^3 + 8^2 = 72\)

19. 
   \[
   \begin{array}{ccc}
   6 & 10 & ? \\
   3 & 2 & 2 \\
   6 & 20 & 4 \\
   12 & 25 & 64 \\
   \end{array}
   \]
   (1) 12  (2) 8  (3) 10  (4) 6
   Ans. (2)

Sol. \(\sqrt{12 \times 6 \times 3} = 6\)
   \(\therefore \sqrt{64 \times 4 \times 2} = 8\)
20.  
\[
\begin{array}{ccc}
9 & 17 & 69 \\
13 & 12 & 62 \\
? & 13 & 81 \\
\end{array}
\]  
(1) 5  (2) 9  (3) 21  (4) 10  
\[\text{Ans. (3)}\]  
\[\text{Sol.} \]  
\[9 \times 2 + 17 \times 3 = 69\]
\[\therefore 7 \times 2 + 13 \times 3 = 81\]
\[\therefore ? = 21\]

21.  
\[
\begin{array}{ccc}
6 & 2 & 8 \\
4 & 5 & 1 \\
7 & 5 & 4 \\
\end{array}
\]  
(1) 8  (2) 10  (3) 13  (4) 6  
\[\text{Ans. (4)}\]  
\[\text{Sol.} \]  
\[7^2 - 5^2 = 4 \times ? \Rightarrow ? = 6\]

22.  
\[
\begin{array}{c}
40 \\
150 \\
180 \\
\end{array}
\]  
(1) 24  (2) 22  (3) 21  (4) 19  
\[\text{Ans. (3)}\]  
\[\text{Sol.} \]  
\[121 - 40 = 9^2\]
Similarly \[25^2 - 184 = (?)^2\]
\[\therefore \text{Answer} = 21\]

23.  
\[
\begin{array}{ccc}
35 & 40 & 43 \\
28 & 10 & 45 \\
15 & 15 & ? \\
20 & 11 & 16 \\
\end{array}
\]  
(1) 38  (2) 35  (3) 28  (4) 25  
\[\text{Ans. (1)}\]  
\[\text{Sol.} \]  
\[(15 + 15 + 40) - 32 = 38\]

24. If Physics = 106  
Then Biology = ?  
(1) 90  (2) 92  (3) 82  (4) 87  
\[\text{Ans. (2)}\]  
\[\text{Sol.} \]  
\[(\text{Sum of positions}) + \text{No of letters}\]
\[\therefore \text{BILOGY} = 92\]

25. If Blue = 160  
Then Book = ?  
(1) 182  (2) 162  (3) 43  (4) 172  
\[\text{Ans. (4)}\]  
\[\text{Sol.} \]  
\[
\text{BOOK} = (2 + 15 + 15 + 11) \times 4 \text{ (No of letters)} = 43 \times 4 = 172\]
Direction: In question (26-27) Find the correct group of signs to solve the Equation.

26. \( \sqrt{100} \times \sqrt{16} \times \sqrt{225} \times \sqrt{1} \)

   (1) \( x, =, + \)  \hspace{1cm} (2) \( +, = x \)  \hspace{1cm} (3) \( +, =, - \)  \hspace{1cm} (4) \( -, x, = \)

Ans. (3)

Sol. \( 10 \times 4 \times 15 \times 1 \)

\( 10 + 4 = 15 - 1 \)

\( 14 = 14 \)

27. \( 24 \times 34 \times 2 \times 5 \times 12 \)

   (1) \( +, \div, x, = \)  \hspace{1cm} (2) \( =, \div, -, + \)  \hspace{1cm} (3) \( +, \div, = x \)  \hspace{1cm} (4) \( =, \div, +, - \)

Ans. (2)

Sol. \( 24 \times 32 \times 2 \times 5 \times 12 \)

\( \Rightarrow 24 = 34 \div 2 - 5 + 12 \)

\( \Rightarrow 24 = 17 - 5 + 12 \)

\( \Rightarrow 24 = 29 - 5 \)

\( = 24 = 24 \)

Direction: In questions (28-31) six children P, Q, R, S, T, U are playing football. P and T are brothers, U is the sister of T. R is the only son of P's uncle, Q and S are the daughters of the only brother of R's father.

28. How is R related to U?

   (1) Brother  \hspace{1cm} (2) Cousin  \hspace{1cm} (3) Uncle  \hspace{1cm} (4) Son

Ans. (2)

Sol. R & U are cousins

29. How many male players are there?

   (1) One  \hspace{1cm} (2) Two  \hspace{1cm} (3) Three  \hspace{1cm} (4) Five

Ans. (3)

Sol. Male Players = Three

   P, R, T
30. How many female players are there?
   (1) Four  (2) Three  (3) Two  (4) One
   Ans. (2)
   Sol. Female Players = Three Q, S, U

31. How is Q related to P?
   (1) Sister  (2) Uncle  (3) Niece  (4) Cousin
   Ans. (1)
   Sol. Q is sister of P.

32. If “Red” is called “Green”; “Green” is called Yellow”; “Yellow” is called “Violet”; “Violet” is called “Blue”; “Blue” is
called “Orange”; Then what is the colour of Vegetable Lady finger
   (1) Green  (2) Blue  (3) Yellow  (4) violet
   Ans. (3)
   Sol. Vegetable lady finger is green coloured and green is called yellow. So lady finger is of yellow colour.

Directions - Questions (33-66) : study the columns and answer. In column I some words are given and their codes are
given in column II. The codes in the column II are not in the same order as the letter of words in column I.

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLOUR</td>
<td>xncap</td>
</tr>
<tr>
<td>TAP</td>
<td>ksd</td>
</tr>
<tr>
<td>ROSE</td>
<td>cmrn</td>
</tr>
<tr>
<td>LOTUS</td>
<td>smcpx</td>
</tr>
<tr>
<td>SAIL</td>
<td>kptm</td>
</tr>
<tr>
<td>F → a</td>
<td></td>
</tr>
<tr>
<td>R → n</td>
<td></td>
</tr>
<tr>
<td>T → s</td>
<td></td>
</tr>
<tr>
<td>A → k</td>
<td></td>
</tr>
<tr>
<td>P → d</td>
<td></td>
</tr>
<tr>
<td>L → p</td>
<td></td>
</tr>
<tr>
<td>O → c</td>
<td></td>
</tr>
<tr>
<td>S → m</td>
<td></td>
</tr>
<tr>
<td>U → x</td>
<td></td>
</tr>
<tr>
<td>I → t</td>
<td></td>
</tr>
<tr>
<td>E → r</td>
<td></td>
</tr>
</tbody>
</table>

33. Find the code of ‘F’
   (1) P  (2) c  (3) x  (4) a
   Ans. (4)
   Sol. F = a
34. Find the code for ‘P’
   (1) d    (2) k    (3) s    (4) c
   Ans. (1)
   Sol. P = d

35. Code of ‘Last’ word
   (1) pkns    (2) mcrx    (3) pkms    (4) pkds
   Ans. (3)
   Sol. L
       A
       S
       T
       p
       k
       m
       s
       = pkms

36. What is Code of ‘PLASTER’ word
   (1) dpkxcrn    (2) dpkmsrn    (3) apxklmd    (4) mrxapak
   Ans. (2)
   Sol. P
       L
       A
       S
       T
       R
       d
       p
       k
       m
       s
       r
       n
       = dpkmsrn

37. How many 5’s are there in the given number sequence each of which are immediately preceded by 3 or 4 but are not immediately followed by 8 or 9.
   3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 4 5 2 3 5 0
   (1) 5    (2) 4    (3) 3    (4) 2
   Ans. (1)
   Sol. No. of 5’s immediately preceded by 3 or 4 but not immediately followed by 8 or 9.
   3 5 9 5 4 5 5 3 5 8 4 5 6 7 3 5 7 5 4 5 2 3 5 0
   Total no. of 5’s = 5

38. How many M’s occur in the following letter series which are preceded by ‘W’ and followed by ‘V’
   (1) 3    (2) 1    (3) 2    (4) 5
   Ans. (2)
   No. of M,’s preceded by W and followed by V = 1.

39. Find the word which cannot be formed from the letters of the word ‘INFRASTRUCTURE’.
   (1) RESTRAIN    (2) FRACTURE    (3) CHARTER    (4) NATURE
   Ans. (3)
   Sol. CHARTER, because H is not present in INFRASTRUCTURE.

40. Find the word which can be formed from the letters of the word ‘ENVIRONMENT’.
   (1) ENVY    (2) ENTERTAIN    (3) ENTRANCE    (4) EMINENT
   Ans. (4)
   Sol. ENVY - Y is not present in ENVIRONMENT
   ENTERTAIN- Only one T is in ENVIRONMENT
   ENTRANCE- C is not present in ENVIRONMENT
   EMINENT- All the alphabets are in ENVIRONMENT so answer is option 4.
Direction - Read the information carefully and answer the questions (41 to 44) - P, T, V, R, M, D, K and W are sitting around a round table. V is second to left of T, T is fourth to right of M, D and P are not immediate neighbours of T. D is the third to the right of P. W is not an immediate neighbour of P. P is to the immediate left of K.

41. Who is second to left of K
   (1) R (2) P (3) M (4) W
   Ans. (1)
   Sol. Second to the left of k = R

42. Who is to the immediate left of V
   (1) T (2) M (3) D (4) W
   Ans. (3)
   Sol. Immediate left of V = D

43. Who is third to right of V
   (1) P (2) R (3) K (4) T
   Ans. (2)
   Sol. Third to the right of V = R.

44. What is P’s position with respect to V
   (1) Fourth to the left (2) Second to the left (3) Fifth to the right (4) Third to the right
   Ans. (1)
   Sol. P’s position with respect to V = fourth to the left.

Direction: Questions (45-46) Four positions of the same dice have been shown. Select the alternative which provides correct answer to the question asked.

45. Which number would be Opposite to 3
   (1) 6 (2) 5 (3) 1 (4) 4
   Ans. (3)
No. opposite to 3 = 1

46. Which number would be opposite to 5
   (1) 6 (2) 4 (3) 3 (4) 2
   Ans. (1)

No. opposite to 5 = 6

47. In a row of twenty five children Gagan is the 14th from the right end. Varun is third to the left of Gagan, What is Varun’s position from the left end of the row,
   (1) Seventh (2) Tenth (3) Eighth (4) Ninth
   Ans. (4)

48. A person is to climb a tree of 50 feet height. In every second he climbs 5 feet but slips down 4 feet. After how many seconds he will be able to touch the top of tree?
   (1) 50 (2) 46 (3) 49 (4) 48
   Ans. (2)

Sol.

climb - slip - net climb

In 1st second- 5 feet 4 feet 1 feet
In 2nd - second 6 feet 4 feet 2 feet
: : :

In 45th - second 49 feet 4 feet 45 feet
In 46th - second Crosses 50 feet
So, person touches the top of the tree in 46 seconds
49. Anju walks 15 metres toward north, then she turns left at 90° and walks 30 metres. Then turn right 90° and walks 25 metre. How far is she from the starting point and is in which direction.

(1) 50 meters, north-west  
(2) 50 meters, west  
(3) 55 meters, north-east  
(4) 60 meters, north

Ans. (1)

In Right angled ΔPQR:

\[ PR^2 = PQ^2 + QR^2 \]
\[ PR^2 = (40)^2 + (30)^2 \]
\[ PR^2 = 1600 + 900 \]
\[ PR^2 = 2500 \]
\[ PR = \sqrt{2500} = 50 \text{ metres} \]

Distance from starting point = \( PR = 50 \text{m}, \) north west.

50. Karan wants to go to college which is situated in a direction opposite to that of a Mall. He starts from his house which is in the east and comes at a four way place (Chauraha). His left side road goes to the Mall and straight in front is the Bus Stand, In what direction is the college located?

(1) North - East  
(2) South  
(3) East  
(4) North

Ans. (4)

Sol. College’s direction = North
**Direction**: Questions (51-54) the following diagrams circle stands for insurance agents, the square stands for hard working, the triangles stands for rural people and rectangle stands for graduates. Based upon these diagrams answer the questions.

51. **Non-rural and hard working Insurance agents who are graduates are indicated by the region**
   (1) 9  (2) 5  (3) 10  (4) 7
   **Ans. (3)**
   **Sol.** Region common to circle, square and rectangle but not in triangle = 10

52. **Insurance agents who are neither graduates nor hard working but rural are represented by the region**
   (1) 12  (2) 11  (3) 10  (4) 8
   **Ans. (1)**
   **Sol.** Region common to circle and triangle but not in square and rectangle = 12

53. **Hard working non-graduates rural agents are represented by the region**
   (1) 6  (2) 9  (3) 7  (4) 12
   **Ans. (3)**
   **Sol.** Region common to circle, triangle and square but not in and rectangle = 7

54. **Non-graduates insurance agents who are not hard working and who do not belong to rural areas are represented by the region**
   (1) 6  (2) 5  (3) 8  (4) 11
   **Ans. (2)**
   **Sol.** Region of circle which is not in triangle, square and rectangle = 5.

55. **Direction**: In question (55-57) which of the following diagrams correctly represents the relation between given three items

55. **Universe, Earth, Europe**
   **Ans. (2)
56. Door, Window, House
Ans. (4)

57. Radio, T.V., Cinema Hall
Ans. (3)

Direction - In question (58-59) Arrange the words as they occur in the dictionary and choose the correct sequence.

58. (I) Select (II) Seldom (III) Send (IV) Selfish (V) Seller
   (1) II, V, IV, I, III  (2) II, I, V, IV, III  (3) I, III, IV, V, III  (4) II, I, V, IV, III
Ans. (4)
Sol. Seldom, Select, Selfish, Seller, Send
II, I, IV, V, III

59. (I) Continuation (II) Contention (III) Contain (IV) Continuous
   (V) Count
   (1) III, I, IV, V  (2) III, II, IV, I, V  (3) III, II, IV, V, I  (4) III, I, II, IV, V
Ans. (1)
Sol. Contain, Contention, Continuation, Continuous, Count
III, II, I, IV, V

Direction - Q (60-61) If > denotes +, < denotes −, + denotes =, ∧ denotes ×, − denotes =, × denotes >, = denotes <. Choose the correct statement in each of following questions.

60. (1) 14 > 18 + 9 = 16 + 4 < 1  (2) 3 < 6 ∧ 4 > 25 = 8 + 4 > 1
    (3) 12 > 9 + 3 < 6 × 25 + 5 > 6  (4) 4 > 3 ∧ 8 < 1 -6 + 2 > 24
Ans. (4)
Sol. (1) $14 + 18 + 9 < 16 + 4 - 1$
$14 + 2 < 4 - 1$
$16 < 3$, Not correct

(2) $3 - 6 \times 4 + 25 < 8 + 4 + 1$
$3 - 24 + 25 < 2 + 1$
$4 < 3$, not correct

(3) $12 + 9 \div 3 - 6 > 25 \div 5 + 6$
$12 + 3 - 6 > 5 + 6$
$9 > 11$, not correct.

(4) $4 \times 3 \times 8 - 1 = 6 \times 2 + 24$
$4 \times 24 - 1 = 3 + 24$
$27 = 27$, which is true

61. (1) $7 \times 7 + 7 - 7 = 7$
$\land 7 > 7 + 7 = 7$
(2) $7 > 7 < 7 + 7 = 14$
(3) $7 < 7 + 7 = 6$
(4) $7 + 7 > 7 = 8$

Ans. (2)

Sol. (1) $7 \times 7 + 7 < 7 \times 7 + 1$
$49 + 1 < 49 + 1$, not correct

(2) $7 + 7 - 7 + 7 < 14$
$14 - 1 < 14$
$13 < 14$, which is correct

(3) $7 - 7 + 7 < 6$
$7 < 6$, not correct

(4) $7 + 7 + 7 < 8$
$1 + 7 < 8$
$8 < 8$, not correct

62. A father is three times as old as his son. Five years ago, he was four times as old as his son. Find the present age of the son
(1) 17 years (2) 15 years (3) 12 years (4) 19 years

Ans. (2)

Sol. $F = 3 \ S$
$F - 5 = 4 \ (S - 5)$
$3S - 5 = 4S - 20$
$S = 15$

Son = 15 years

63. An ice compartment of a refrigerator is 6 cm wide and 8 cm deep (long) and 5 cm high. The number of cubes of ice having an edge of 2 cm will there be in the compartment
(1) 80 (2) 30 (3) 24 (4) 20

Ans. (2)

Sol. No. of Ice cubes $= \frac{8 \times 6 \times 5}{2 \times 2 \times 2} = 30$
64. What is the least number of coins required to make one rupee from different coins of 1, 5, 10 and 25 paise, so that you have at least one coin of each type

(1) 11  (2) 12  (3) 7  (4) 4

Ans. (1)

Sol.
1 paise – 5 coins
5 paise – 2 coins
10 paise – 1 coin
25 paise – 3 coins

**Total = 11 coins**

65. If “STATION MASTERS MIND THE TRAIN” = 98. Then “SCHOOL MASTERS TRAIN THE MIND” = ?

(1) 96  (2) 85  (3) 99  (4) 72

Ans. (4)

Sol. If both the lines, “masters mind the train” is common.

Position sum of STATION is 98

Position sum of SCHOOL is 72

66. At what time between 4 and 5 O’clock will the minute hand and hour hand of a clock be in opposite direction

(1) 40 minutes past 4  (2) \(54\frac{6}{11}\) minutes past 4  (3) 42 minutes past 5  (4) \(54\frac{4}{11}\) minutes past 5

Ans. (2)

Sol. Between 4 and 5

\[|30H - \frac{11}{2} M| = 180^\circ\]

\[|30(4) - \frac{11}{2} M| = 180^\circ\]

\[\frac{11}{2} M = 300\]

\[M = \frac{600}{11} = 54\frac{6}{11} \text{ minutes}\]

So, \(54\frac{6}{11}\) minutes past 4.

67. The minute hand of a clock overtakes the hour hand at intervals of 65 minutes of the correct time. How much in a day does the clock gain or lose?

(1) Lose \(10\frac{10}{143}\) minutes  (2) Gain \(10\frac{10}{143}\) minutes  (3) Gain \(11\frac{10}{143}\) minutes  (4) Lose \(11\frac{10}{143}\) minutes

Ans. (2)
Sol. Two hands co-incide in every $65\frac{5}{11}$ minutes.

So, clock gains $\frac{5}{11}$ min in every 65 minutes.

In 65 min, it gains $\frac{5}{11}$ min.

In 65 min, it gains $\frac{5}{11 \times 65}$ min.

In $(24 \times 60)$ min, it gains $\frac{5}{11 \times 65} \times 24 \times 60 = 10\frac{10}{143}$ min.

Gains $10\frac{10}{143}$ min in 1 day.

68. Any day in April is always on the same day of the week as the corresponding day in
(1) June (2) December (3) July (4) August
Ans. (3)

Sol. April - 30 days
May - 31 days
June - 30 days
Total = 91 days = 0 odd day.
There is 0 odd day from 1st April to 1st July.

69. On what dates of August 1980 did Tuesday fall?
(1) 2nd, 9th, 16th , 23rd, 30th (2) 3rd, 10th, 17th, 24th, 31st
(3) 4th, 11th, 18th, 25th (4) 5th, 12th, 19th, 26th
Ans. (4)

Sol. 5th, 12th, 19th, 26th, August

70. Teena’s income is 25% more than Meena. By what percent Meena’s income is less than Teena
(1) 20 (2) 18 (3) 25 (4) 15
Ans. (1)

Sol. Meena’s income = Rs. 100
Teena’s income = Rs. 125
Difference = Rs. 25

Percentage by which Meena’s income is less than by Teena’s = $\frac{25}{125} \times 100 = 20\%$

71. Find correct Conclusion from Statement

Statements :
(I) Mohit is an artist
(II) Artists are beautiful

Conclusions :
(1) Mohit is not beautiful. (2) All beautiful Persons are artists.
(3) Mohit is beautiful. (4) Beautiful Persons are not artists.

Ans. (3)

Sol. Correct conclusion is:
Mohit is beautiful.
72. How many triangles and parallelograms are in the given figure

(1) 21,17 (2) 19,13 (3) 19,17 (4) 21,15
Ans. (1)
Sol. Triangles 21, parallelograms – 17

73. Select from the four alternatives, the box that can be formed by folding the sheet as shown in figure.

(B) (A) (C) (D)

(1) B only (2) A only (3) A and C only (4) A,B,CandD
Ans. (1)
Sol. As B is opp to F, E is opposite to C, A is opposite to D.
So, options A, C, D are not possible

74. Find the Mirror Image of figure.

(1) PLEDGE (2) PRLEDGE (3) bLEDGE (4) bLEDGE
Ans. (3)

Direction: In questions (75-77) find the correct alternative from the Answer figures to complete the question figures

75.

(1) (2) (3) (4)
Ans. (2)

76.

(1) (2) (3) (4)
Ans. (4)
Direction - In questions (78-80), The question figure is embedded in one of the Answer figure. Find the alternative in which it is embedded.

78.

Ans. (4)

Direction - (Question 81-83): Paper is folded as shown with the dotted lines in ‘X’ & ‘Y’ and the last figure ‘Z’ has been cut. How would the paper look like when unfolded.

81. Question figure

Answer figure

Ans. (4)
82. Question figure

![Figure](image)

Figure figure

(1) ![Option](image) (2) ![Option](image) (3) ![Option](image) (4) ![Option](image)

Ans. (3)

Sol.

83. Questions figure

![Figure](image)

Answer figure

(1) ![Option](image) (2) ![Option](image) (3) ![Option](image) (4) ![Option](image)

Ans. (2)

Sol.

Direction - In questions (84-86), which figure among Alternatives will replace the question mark according to series.

Question Figure

84. ![Option](image)

Answer figure

1 ![Option](image) 2 ![Option](image) 3 ![Option](image) 4 ![Option](image)

Ans. (2)

Sol. Hands are moving opp sides by one-one division.
85. **Question figure**

![Figure 1](image1)

**Answer figure**

![Figure 2](image2)

**Ans. (4)**

86. **Question Figure**

![Figure 3](image3)

**Answer figure**

![Figure 4](image4)

**Ans. (2)**

**Direction:** First rotate the figure by 90° in clockwise direction and then find out the water Image from the given Alternatives.

87. **Question Figure**

![Figure 5](image5)

**Answer Figure**

![Figure 6](image6)

**Ans. (4)**

**Sol.**

![Water Image](image7)
Direction - In questions (88-90) select the alternative which satisfy the same condition of placement of dots as shown in the figure

88. Question figure

![Question figure]

Answer figure

(1) ![Answer figure 1]
(2) ![Answer figure 2]
(3) ![Answer figure 3]
(4) ![Answer figure 4]

Ans. (1)

Sol. (A) Comon portion between rectangle and triangle.
(B) Comon portion between circle, triangle and rectangle.
(C) Comon portion between square rectangle.

89. Question figure

![Question figure]

Answer figure

(1) ![Answer figure 1]
(2) ![Answer figure 2]
(3) ![Answer figure 3]
(4) ![Answer figure 4]

Ans. (4)

Sol. A → square and circle.
B → triangle and square.
C → rectangle and triangle.
90. Question figure

Answer figure

(1)  (2)  (3)  (4)

Ans. (1)
Sol. A → Circle and triangle.
     B → Triangle and square.

Direction - In question (91-93) figure A and B are related in some Particular Manner. Replace question mark for figure D, by developing same relationship between C and D as is between A & B

91. Question Figure

Answer Figure

1  2  3  4

Ans. (4)
Sol. Only option (4) is resending to D.
92. Question Figure

![Question Figure]

Answer Figure

![Answer Figure]

Ans. (3)

Direction - In question (94-95) out of four figures, one figure is different, while the others are similar in some way. Find out the different figure.

93. Question Figure

![Question Figure]

Answer Figure

![Answer Figure]

Ans. (1)

94.

![Figure 94]

(1) 1  (2) 2  (3) 3  (4) 4

Ans. (3)

95.

![Figure 95]

(1) 1  (2) 2  (3) 3  (4) 4

Ans. (4)
**Direction:** In question (96-97) Five diagrams A,B,C,D,E are given. Three out of these when put together make a square. Find the alternative which one has three such diagrams.


**Ans.** (1)

**Sol.**


**Ans.** (2)

**Sol.**

**Direction:** In questions 98-99 if two figures among five figures are interchanged then five figures arranged in certain order. Find among alternatives.

98. (1) 1, 3  (2) 2, 3  (3) 1, 2  (4) 2, 4

**Ans.** (3)

**Sol.**

99. (1) 4, 5  (2) 1, 2  (3) 2, 3  (4) 3, 4

**Ans.** (1)

**Sol.**
100. How many squares are in given figure.

![Diagram of a grid with squares]

(1) 32  (2) 48  (3) 78  (4) 70

Ans. (4)

Sol.  
8 \times 4 = 32
7 \times 3 = 21
6 \times 2 = 12
5 \times 1 = 5
= 70