1. 3, 7, 16, 35, 74 __________
   (1) 150  (2) 153  (3) 161  (4) 163
   Ans. (2)

2. 38, 49, 62, 70, 77 __________
   (1) 82  (2) 81  (3) 97  (4) 91
   Ans. (4)

3. 3, 4, 13, 4, 5, 21, 5, 6, 31, 7, 6 __________
   (1) 55  (2) 42  (3) 57  (4) 45
   Ans. (1)

4. 1, 8, 9, 64, 25, 216, 49, __________
   (1) 343  (2) 512  (3) 1001  (4) 81
   Ans. (2)
5. AY, CW, EU, GS, ________.
   (1) JO   (2) LN   (3) IQ   (4) DV

   Ans. (3)
   Sol. AY, CW, EU, GS, IQ

   Directions: Questions (6 to 10): Three terms are alike in certain way the one different, Find that odd/Wrong/different

6. 2, 12, 36, 80, 152, 252
   (1) 252   (2) 152   (3) 12   (4) 40

   Ans. (2)
   Sol. $2, \quad 12, \quad 36, \quad 80, \quad 152, \quad 252$
       $1^2 + 1^1, \quad 2^2 + 2^0, \quad 3^2 + 3^1, \quad 4^2 + 4^1, \quad 5^2 + 5^1, \quad 6^2 + 6^1$

7. 2, 3, 8, 27, 110, 565
   (1) 110   (2) 8   (3) 27   (4) 565

   Ans. (1)
   Sol. $2, \quad 3, \quad 8, \quad 27, \quad 110, \quad 565$
       $2 \times 2^2 + 2, \quad 3 \times 3^2 + 3, \quad 4 \times 4^2 + 4 = 112$

8. 12, 14, 18, 26, 38, 60, 74
   (1) 26   (2) 74   (3) 18   (4) 60

   Ans. (4)
   Sol. 12, 14, 18, 26, 38, 60, 74
       $12 = 12 + (1 \times 2) = 14$
       $14 = 14 + (1 \times 4) = 18$
       $18 = 18 + (1 \times 8) = 26$
       $26 = 26 + (2 \times 6) = 38$
       $38 = 38 + (3 \times 8) = 62$

9. (1) AEDCB   (2) KONML   (3) QSTUR   (4) HLKJI

   Ans. (3)
   Sol. $+4 -1 -1 -1$
       A E D C B
       $+4 -1 -1 -1$
       K O N M L
       $+2 +1 +1 -3$
       Q S T U R
       $+4 -1 -1 -1$
       H L K J I
10. (1) ANRYAAH    (2) DGRHAAIHCN    (3) ANHTAJASR    (4) BNJUAP
Ans. (2)
Sol. (i) ANRYAAH - HARYANA (STATE)
     (ii) DGRHAAIHCN - CHANDIGARH (U.T)
     (iii) ANHTAJASR - RAJASTHAN (STATE)
     (iv) BNJUAP - PUNJAB (STATE)
     (i), (iii) & (iv) are states only (ii) is UT.
So option (2) is correct

Directions : Questions (11 to 15) : Analyse the series and fill the gap

11. a __ ba __ bb __ __ bb __ a __
   (1) aabbaa  (2) abbbab  (3) baaaab  (4) baaaba
Ans. (4)
Sol. b
     a
     b
     a a
     b

12. __ aab __ caa __ bbc __ a __ b __ ca
   (1) abaaba  (2) abaaab  (3) cbacaa  (4) abcbaa
Ans. (2)
Sol. a a
     a
     b
     b
     c
     a
     b
     a
     a
     b

13. __ bc __ bb __ aab __ __
   (1) ababc  (2) acacc  (3) aaccb  (4) babcc
Ans. (4)
Sol. b c
     b
     a
     a
     b

14. 23 __ 4 __ 1 __ 53 __ __ 3 __ 41
   (1) 514322  (2) 513242  (3) 254312  (4) 514225
Ans. (4)
Sol. 3 4 1 4 2
     2 2 5

15. 10 __ 2 __ 02 __ 022
   (1) 2122  (2) 2121  (3) 2101  (4) 1022
Ans. (2)
Sol. 10 2 0 2
     1 2 2
Directions: Questions (16 to 20): Two terms before sign : : have the relationship between them. Analyzing the relationship develop same kind of relationship among the terms after sign : : and answer among alternatives.

16. \(321 : 12 : : 524 : ?\)
   (1) 29  (2) 33  (3) 35  (4) 31
   Ans. (4)
   Sol. 321 524
       (3 – 2) = 1  (5 – 2) = 3
       (3 – 1) = 2  (5 – 4) = 1
       (12) (31)

17. \(23 : 127 : : 47 : ?\)
   (1) 423  (2) 525  (3) 345  (4) 341
   Ans. (3)
   Sol. 23 127 47 : 345
       \(5^2 – 2\) \(5^3 + 2\) \(7^2 – 2\) \(7^3 + 2\)

18. \(24 : 816 : : 35 : ?\)
   (1) 2527  (2) 2725  (3) 2716  (4) 618
   Ans. (2)
   Sol. \(2^3 = 8\) \(816\) \(3^3 = 27\) \(2725\)
       \(4^2 = 16\) \(5^2 = 25\)

19. \(XVR : WWS : : DXK : ?\)
   (1) LCY  (2) CYL  (3) YCL  (4) RLY
   Ans. (2)
   Sol. X V R D X K
       -1 +1 +1 -1 +1 +1
       W W S C Y L

20. \(RP : 89 : : TH : ?\)
   (1) 104  (2) 420  (3) 410  (4) 424
   Ans. (3)
   Sol. 18 16 20 8 410
       89 10 410 410

---

4
Directions: Questions (21) : Find the missing character

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>21.</td>
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<td>32</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>17</td>
</tr>
</tbody>
</table>

(1) 58  (2) 63  (3) 93  (4) 84

Ans. (4)

Sol.

(2 × 3) × (2 × 4)
6 × 8 = 48
(3 × 2) × (3 × 3) = 6 × 9 = 54
(3 × 4) × (1 × 7) = 12 × 7 = 84

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<tbody>
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<tr>
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<td>47</td>
<td>53</td>
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<tr>
<td></td>
<td>59</td>
<td>?</td>
</tr>
</tbody>
</table>

(1) 29  (2) 67  (3) 84  (4) 62

Ans. (2)

Sol. Series of prime numbers.

<p>| | | |</p>
<table>
<thead>
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<tr>
<td></td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>84</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>6</td>
</tr>
</tbody>
</table>

(1) 26  (2) 156  (3) 39  (4) 70

Ans. (2)

Sol.

12 × 13 = 156
24. ![Diagram]

(1) 10  (2) 8  (3) 112  (4) 124

Ans. (2)

Sol. \((13 - 8) = 5^3 = 125\)

**Directions : Questions (25 to 28) :** Answer the questions based on diagram

25. How many squares are there?

(1) 10  (2) 12  (3) 15  (4) 12

Ans. (2)

Sol. On counting, the number of squares = 12

26. How many rectangles are there excluding squares?

(1) 10  (2) 13  (3) 15  (4) 12

Ans. (4)

Sol. On counting, the number of rectangles excluding squares = 12.

27. How many triangles are in the figure?

(1) 56  (2) 57  (3) 54  (4) 43

Ans. (3)

Sol. On counting, the number of triangles = 54.

28. How many straight lines are given in the figure

(1) 10  (2) 12  (3) 14  (4) 16

Ans. (3)

Sol. On counting, the number of straight lines = 14

**Directions : Questions (29 to 33) :** According to the code language, words in the column are given and their codes are given in column II. Decode the language and choose the correct code for the words in questions (29-35) among given alternatives.

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>LASER</td>
<td>inmcq</td>
</tr>
<tr>
<td>HEAVY</td>
<td>nstmz</td>
</tr>
<tr>
<td>WATER</td>
<td>hxqkm</td>
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<tr>
<td>PLANE</td>
<td>menfe</td>
</tr>
<tr>
<td>SHOCK</td>
<td>xlyzd</td>
</tr>
<tr>
<td>MIRTH</td>
<td>wzkaq</td>
</tr>
<tr>
<td>STONE</td>
<td>xnlike</td>
</tr>
</tbody>
</table>
29. Code for E
   (1) n    (2) m    (3) q    (4) s

**Ans. (Bonus)**

**Sol.** Error in question, cannot predict the code for A and E.

30. Code for A
   (1) x    (2) z    (3) d    (4) m

**Ans. (Bonus)**

31. Code for S
   (1) x    (2) l    (3) c    (4) a

**Ans. (2)**

**Sol.** Look for the words having letter ‘S’ in common and also their codes.

- LASER - lnmcq
- SHOCK - nlyzd
- STONE - xnlke

∴ S → l

32. Code for L
   (1) m    (2) e    (3) c    (4) z

**Ans. (3)**

**Sol.** Following the same procedure as in Q. 31, we get L → C.

33. Code for R
   (1) z    (2) k    (3) l    (4) q

**Ans. (4)**

**Sol.** Following the same procedure as in Q. 31, we get R → Q.

34. In a certain code language, 134 means ‘Good and Tasty’, 478 means ‘See Good Picture’, and 729 means ‘Picture are faint’. Which of the following numerical symbols stands for ‘See’?
   (1) 4    (2) 2    (3) 7    (4) 8

**Ans. (4)**

**Sol.** 134 good and tasty (i)
478 see good picture (ii)
729 picture are faint. (iii)

Look for code of see, which can be predicted as 4 is common in (i) and (ii). There for 4 stands for “Good” and 7 is common in (ii) and (iii) therefore ‘7’ stands for picture (as it is also common in (ii) and (iii) Therefore 8 stands for ‘Sea’
Direction (35-37) Study the following information carefully and answer the questions that follows:

A, B, C, D, E, F & G are seven kids playing in the garden. They are wearing clothes of colours- black, blue, white, green, pink, yellow and brown. Out of seven, three are girls. No girl is wearing either black yellow or brown. D’s sister F is wearing pink while he is wearing brown. A is wearing blue, while his sister B is not wearing green. E is wearing yellow, while his best friend G is a boy.

35. What colour is B wearing?
   (1) Green (2) Pink (3) Brown (4) None of these
   Ans. (4)
   Sol. (35-37)

<table>
<thead>
<tr>
<th>Boy/Girl</th>
<th>Black</th>
<th>Blue</th>
<th>White</th>
<th>Green</th>
<th>Pink</th>
<th>Yellow</th>
<th>Brown</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Boy</td>
<td>Yes</td>
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<tr>
<td>B</td>
<td>Girl</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>C</td>
<td>Girl</td>
<td>Yes</td>
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<td>D</td>
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<td></td>
<td>Yes</td>
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<tr>
<td>F</td>
<td>Girl</td>
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<td></td>
<td>Yes</td>
</tr>
<tr>
<td>G</td>
<td>Boy</td>
<td>Yes</td>
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36. What colour is G wearing?
   (1) Black (2) Blue (3) White (4) Green
   Ans. (1)

37. What colour is C wearing?
   (1) Black (2) Green (3) White (4) None of these
   Ans. (2)

Direction: Find the missing character in questions (38-39) such that it follows some rule:

38. Find the missing character in questions that it follows some rule:

\[
\begin{align*}
&2^2 + 3^3 + 4^4 = 287, \\
&3^3 + 4^4 + 5^5 = 3408, \\
&2^2 + 4^4 + 5^5 = 3385
\end{align*}
\]
   (1) 3385 (2) 3395 (3) 3412 (4) 297
   Ans. (1)
   Sol. \(2^2 + 3^3 + 4^4 = 287, 3^3 + 4^4 + 5^5 = 3408, 2^2 + 4^4 + 5^5 = 3385\)

39. Find the missing character in questions that it follows some rule:

\[
\begin{align*}
&4^2 = 16, 5^2 = 25, 6^2 = 36, 7^2 = 49, 8^2 = 64, 9^2 = 81, 10^2 = 100
\end{align*}
\]
   (1) 125 (2) 512 (3) 1728 (4) 343
   Ans. (3)
40. At what time between 4 and 5 O'clock will are hands of clock coincides.

(1) \(32\frac{10}{11}\) minute past 4 

(2) \(21\frac{9}{11}\) minute past 4 

(3) \(21\frac{10}{11}\) minute past 4 

(4) 22.5 minute past 4 

Ans. (2) 

Sol. To coincide minute hand have to gain 20 minute. As 55 minute are gained in 60. Similarly 20 minutes are gained in \(\frac{60}{55} \times 20 = \frac{240}{11}\) .

\(\therefore\) \(21\frac{9}{11}\) minutes past 4.

41. India got independence on FRIDAY. What will be the day on which Indians will celebrate the independence day in 2047.

(1) Thursday  

(2) Friday  

(3) Sunday  

(4) Tuesday 

Ans. (1) 

Sol. 15 August 1947– 15 August 2047. There will be hundred years. Therefore counting odd days. The day will be Thursday.

42. If 2nd day of a month is Tuesday, which will be the fifth day from 20th day of that month?

(1) Tuesday  

(2) Wednesday  

(3) Thursday 

(4) Friday 

Ans. (3) 

Sol. 

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43. If G + I = 130 then H + L will be equal to

(1) 20 

(2) 144 

(3) 206 

(4) 208 

Ans. (4) 

Sol. 

\[ G + I = 130 \] 

\[ H + L = 208 \] 

\[ 7^2 + 9^2 = 130 \] 

\[ 8^2 + 12^2 = 208 \] 

44. P and Q are married couple, R and S are sisters. Q’s son is S’s father. How is P related to R?

(1) Uncle  

(2) Mother  

(3) Grandmother  

(4) Father

Ans. (3) 

Sol. 

\[ P + Q \]

\[ \times \]

\[ S \]

\[ \rightarrow R \]

45. Pointing to a boy, Rita said “His father is my son’s only son”. How is the boy related to Rita?

(1) Son  

(2) Daughter  

(3) Grand daughter  

(4) Great Grand Son 

Ans. (4)
46. In a row, A is 8th from the left and B is 17th from the right. If they interchange their positions A becomes 14th from the left. How many persons are there in the row?

(1) 25 (2) 27 (3) 31 (4) 30

Ans. (4)

Sol. Clearly the position of A is 14 from left and 17 from right. Therefore no. of persons are

$= 14 + 17 - 1 = 30$

47. Suresh left home for the bus stop 10 minutes earlier then the usual time and reached the bus stop at 9.25 a.m., he takes another 20 minute to reach office. If Suresh usually office 5 minutes before office time then at what time today he reached office?

(1) 9.00 am (2) 8.00 am (3) 10.00 am (4) 9.30 am

Ans. (Bonus)

Direction - Questions (48-51) are based upon the sum of addition, each letter has unique value and for unique value there is unique letter. If E = 4,

\[
\begin{align*}
\text{LET} & \quad + \quad \text{THE} \\
\text{LOSS} & \quad \phantom{+} \phantom{+} \phantom{+}
\end{align*}
\]

48. Value of S

(1) 4 (2) 2 (3) 5 (4) 6

Ans. (2)

Sol. E = 4

O = 0

T = 8

L = 1

S = 2

H = 7

49. Value of H

(1) 3 (2) 6 (3) 9 (4) 7

Ans. (4)

Sol. Refer to solution of Q. 48

50. Value of L

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

Ans. (3)

Sol. Refer to solution of Q. 48

51. Value of T

(1) 8 (2) 9 (3) 7 (4) 2

Ans. (1)

Sol. Refer to solution of Q. 48
52. If NTSE = 58, NMMS = 59, then PSTSE = ?
   (1) 79  (2) 62  (3) 56  (4) 48
   **Ans. (1)**
   **Sol.**
   NTSE = 14 + 20 + 19 + 5 = 58
   NMMS = 14 + 13 + 13 + 19 = 59
   ∴ PSTSE = 16 + 19 + 20 + 19 + 5 = 79

53. If OM = 195, HARI = 1296 then RAM = ?
   (1) 186  (2) 294  (3) 1392  (4) 234
   **Ans. (4)**
   **Sol.**
   OM = 15 × 13 = 195
   HARI = 8 × 1 × 18 × 9 = 1296
   ∴ RAM = 18 × 1 × 13 = 234

**Direction:** In questions (54-55) mathematical signs have no meaning. Find clue and target answer.

54. 7 × 7 × 7 = 89
    5 × 8 × 7 = ?
    (1) 95  (2) 69  (3) 86  (4) 87
    **Ans. (2)**
    **Sol.**
    3 × 4 × 4 = 82
    9 × 3 × 4 = 93
    7 × 7 × 7 = 89
    5 × 8 × 7 = ?
    (1) 95  (2) 69  (3) 86  (4) 87
    **Ans. (2)**
    **Sol.**
    3 × 4 × 4 ⇒ (I + III) × II
    (I) (II) (III) = (3 + 4) × 4 = 7 × 4 = 28
    Reversed = 82
    9 × 3 × 4 ⇒ (9 + 4) × 3
    = 13 × 3 = 39
    Reversed = 93
    ∴ 5 × 8 × 7 ⇒ (5 + 7 ) × 8
    = 12 × 8= 96
    Reversed = 69

55. 46 – 3 = 12
    64 – 9 = 12
    ? – 6 = 3
    (1) 62  (2) 43  (3) 28  (4) 24
    **Ans. (3)**
    **Sol.**
    46 – 3 = 12
    46 = 12 + 3
    RHS ⇒ 12 +3 = 15 × 3 + 1
    = 45 + 1 = 46 = LHS
    64 – 9 = 12
    64 = 12 + 9
    RHS ⇒ 12 + 9 = 21 × 3 + 1
    = 63 + 1 = 64 = LHS
    ∴ ? – 6 = 3
    ? = 3 + 6
    RHS ⇒ 3 + 6 = 9 × 3 + 1
    = 27 + 1 = 28 LHS.
Directions (56-58): In the following questions three classes are given, out of the following four figures that follow, you are to indicate which figure will represent the relationship amongst the three classes.

56. Beverages, Tea, Coffee
   Ans. (3)
   Sol. Since, Tea and coffee are both beverages

57. Triangle, Rectangle, Polygon
   Ans. (3)
   Sol. Since, Triangle and rectangle are both polygons.

58. Patiala, Punjab, Gujarat
   Ans. (4)
   Sol. Since, Patiala is in Punjab and Gujrat is a separate state.

Direction - Six faces of a cube are painted in a manner that no two adjacent faces have the same colour. The three colours used are red, blue and green. The cube is cut into 36 cubes in a manner that 32 cubes are of smaller same size and 4 cubes are of bigger size. Each bigger cube has no red face.

59. How many cubes in all have red face?
   (1) 8          (2) 16          (3) 20          (4) 32
   Ans. (4)
   Sol. As observed in the figure, there are total 32 cubes in all have red face.

60. How many cubes have only one face coloured?
   (1) 0          (2) 16          (3) 8           (4) 20
   Ans. (3)
   Sol. On one side layer, there are 4 smaller cubes with only one face painted. Since, there are 2 such layers.
   \[
   \therefore 4 \times 2 = 8
   \]

61. How many cubes have three faces painted?
   (1) 8          (2) 20          (3) 16          (4) 28
   Ans. (1)
   Sol. Only cubes on vertices have 3 faces painted.

62. How many cubes have only two faces painted?
   (1) 28         (2) 20          (3) 16          (4) 8
   Ans. (2)
   Sol. As observed, there are total 20 cubes with only 2 faces painted.
63. Rohit is facing west. He turns $45^\circ$ in the anticlockwise direction and then $180^\circ$ in the clockwise direction. Which direction is he facing now?

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

Ans. (2)

Sol. 

64. Rajan moves 3 metres in north direction then he moves 4 metres in east direction. How far is he from the starting point?

(1) 7 meters  (2) 5 meters  (3) 4 meters  (4) 1 meters

Ans. (2)

Sol. 

\[ AB^2 + BC^2 = 4^2 + 3^2 = 16 + 9 = 25 = AC^2 \]

\[ \therefore AC = 5 \text{ m} \]

65. 36 vehicles are parked in a single row. After the first car there is one scooter, after the second car there are two scooters. After the third car there are three scooters. How many scooters are in the second half of the row?

(1) 17  (2) 15  (3) 12  (4) 10

Ans. (2)

Sol. Let the cars be represented by longer lines and scooters by smaller lines.

: No. of scooters = 15.

66. Which word cannot be formed from RECOMENDABLE

(1) COMENDOR  (2) MENDRECO  (3) ABLEDGOR  (4) MOCABLE

Ans. (3)

Sol. ABLEDGOR cannot be formed as it does not contain G.

67. Mansavi wants to go to the market. She starts from her house which is in north and comes to the crossing. The road to her left ends in a park and straight ahead is the office complex. In which direction is the market?

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

Ans. (3)

Sol. 

:: Market is in west.
Direction (68-71) Study the following information and answer the given questions: In the following cases/questions in certain code language if

'+' means '×', '−' means '×', '+' means '×', ')' means '×', '−' means '−'

68. $8 + 2 \times 5 - 3 = ?$
   (1) 27 (2) 15 (3) 19 (4) 47
   Ans. (3)
   Sol. $8 + 2 \times 5 \times 3$
   $= 4 + 5 \times 3 = 4 + 15 = 19$

69. $9 - 2 \times 27 + 3 - 1 = ?$
   (1) –51 (2) 180 (3) 26 (4) None of these
   Ans. (3)
   Sol. $9 \times 2 + 27 + 3 - 1$
   $= 9 \times 2 + 9 - 1 = 18 + 9 - 1 = 27 - 1 = 26$

70. $16 + 2 - 3 \times 1 = ?$
   (1) –3 (2) 30 (3) 105 (4) None of these
   Ans. (2)
   Sol. $16 \times 2 \times 3 + 7 - 1$
   $= 8 \times 3 + 7 - 1 = 24 + 7 - 1 = 31 - 1 = 30$

71. $49 + 7 - 5 \times 8 = ?$
   (1) 16 (2) 22 (3) 43 (4) None of these
   Ans. (3)
   Sol. $49 + 7 \times 5 + 8$
   $= 7 \times 5 + 8 = 35 + 8 = 43$

Direction (Question 72-75): study the following information and answer the given question:

In the following figure 'Rectangle represents Cricketers', 'Circle represents Young' and Triangle represents Singers':

72. Which region represents young Cricketers who are not singers?
   (1) B (2) G (3) C (4) F
   Ans. (3)

73. Which region represents Old Cricketers who are not singers?
   (1) B (2) G (3) F (4) C
   Ans. (2)

74. Which region represents Young people who are neither Cricketers nor Singers?
   (1) A (2) D (3) B (4) C
   Ans. (2)

75. Which region represents Cricketers who are Singers but not young?
   (1) E (2) A (3) C (4) F
   Ans. (4)
**Direction**: Figure(X) is embedded in which of the following four alternatives.

76. 

(X) 

(1) [Image] (2) [Image] (3) [Image] (4) [Image] 

**Ans.** (4)

77. 

(1) [Image] (2) [Image] (3) [Image] (4) [Image] 

**Ans.** (2)

**Direction (78-79)**- A piece of paper is folded and cut is made as shown below. From the given responses indicate how it will appear when opened?

78. **Question Figure** 

[Image]  [Image]  [Image]  [Image] 

**Answer Figure** 

(1) [Image] (2) [Image] (3) [Image] (4) [Image] 

**Ans.** (4)

**Sol.** 

79. **Question Figure** 

[Image]  [Image]  [Image] 

**Answer Figure** 

(1) [Image] (2) [Image] (3) [Image] (4) [Image] 

**Ans.** (3)

**Sol.** 


**Direction-** Three figures marked I, II, III ahve one fold at 1, 2nd fold at II and is cut in figure III. From among the four alternatives which will show the unfolded position of figure III.

80.  

(1) [Diagram 1]  (2) [Diagram 2]  (3) [Diagram 3]  (4) [Diagram 4]

**Ans. (2)**

**Sol.**

**Direction (81-82)-** In questions, select the correct figure among alternatives to continues series.

81.  

(1) [Diagram 1]  (2) [Diagram 2]  (3) [Diagram 3]  (4) [Diagram 4]

**Ans. (3)**

**Sol.**

For position of △
Since it follows, △ △ △
So next figure will be

82.  

(1) [Diagram 1]  (2) [Diagram 2]  (3) [Diagram 3]  (4) [Diagram 4]

**Ans. (2)**

**Sol.** Alternately arrows are upwards and downward. Also position of arrow will follow sequence.

↑ ↑ ↑
**Direction**- In the following question, there are four question figure followed by the answer figures labelled as (1), (2), (3) and (4). The four question figure make common series. Find the correct figures from answer figures which will complete the series.

83. 

84. 

85. 

86. 

Ans. (2)

Sol.

Ans. (4)

Sol. Figure A is rotated 90° anti-clockwise to form figure C. So rotate figure B to 90° anti-clockwise to obtain figure D.

Ans. (1)

Sol. B is mirror image of A, So (1) is mirror image of C.

Ans. (3)

Sol. Since △ || △ 

So, △ || △
87.

![Diagram](image1)

(1) ![Option A](image2) (2) ![Option B](image3) (3) ![Option C](image4) (4) ![Option D](image5)

Ans. (1)

Sol.

![Solution Diagram](image6)

88.

![Diagram](image7)

(X)

(1) ![Option A](image8) (2) ![Option B](image9) (3) ![Option C](image10) (4) ![Option D](image11)

Ans. (3)

Sol.

![Solution Diagram](image12)

89.

![Diagram](image13)

(X)

(1) ![Option A](image14) (2) ![Option B](image15) (3) ![Option C](image16) (4) ![Option D](image17)

Ans. (4)

Sol.

![Solution Diagram](image18)

90.

![Diagram](image19)

(X)

(1) ![Option A](image20) (2) ![Option B](image21) (3) ![Option C](image22) (4) ![Option D](image23)

Ans. (3)

Sol.

![Solution Diagram](image24)
**Direction**-Complete the given figure (X) among alternatives.

91. [Diagram of figure X] (X)
   
   (1) [Diagram of alternative 1]  (2) [Diagram of alternative 2]  (3) [Diagram of alternative 3]  (4) [Diagram of alternative 4]

   Ans. (3)

   Sol. Water image

92. [Diagram of figure X] (X)
   
   (1) [Diagram of alternative 1]  (2) [Diagram of alternative 2]  (3) [Diagram of alternative 3]  (4) [Diagram of alternative 4]

   Ans. (Bonus)

   Sol. Mirror image

   So, [Diagram of mirror image]

93. [Diagram of figure X] (X)
   
   (1) [Diagram of alternative 1]  (2) [Diagram of alternative 2]  (3) [Diagram of alternative 3]  (4) [Diagram of alternative 4]

   Ans. (1)

   Sol. Mirror image of figure at left.
94. ![Diagram](image1)

**Ans.** (1)

**Sol.** Clearly seen option (1) is correct.

95. ![Diagram](image2)

**Ans.** (3)

**Sol.** Clearly seen option (3) is correct.

**Direction:** Find the water image of (X).

96. ![Diagram](image3)

**Ans.** (4)

**Sol.**

97. ![Diagram](image4)

**Ans.** (2)

**Sol.** 

DOLLAR

DOLLAR

DOLLAR

DOLLAR
**Direction** - In questions, select among the alternative which satisfy the same condition of placement of dots as in the given figure (X).

**98.**

![Figure X](image)

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

**Ans. (1)**
**Sol.** Common area is between triangle and square, triangle and circle, triangle and rectangle.

**99.**

![Figure X](image)

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

**Ans. (2)**
**Sol.** Common area is between circle and triangle, square and triangle.

**100.**

![Figure X](image)

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

**Ans. (4)**
**Sol.** Common area is between triangle, square and circle, circle and square, circle and triangle.