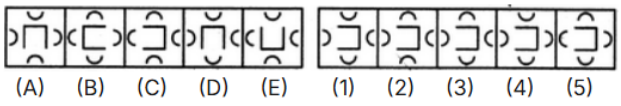
Picture reasoning, Cubes & cuboid, Dice

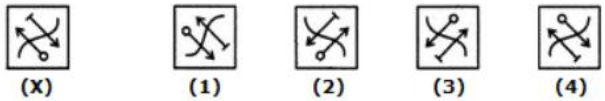
Q1. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:



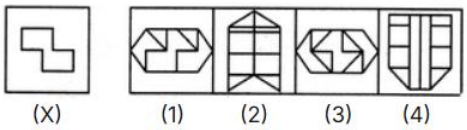
(a) 1 (b) 2 (c) 3 (d) 4 (e) 5

Q2. Choose the correct water image of the given figure (X) from amongst the four alternatives.



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

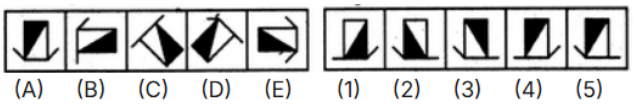
Q3. Find out the alternative figure which contains figure (X) as its part.



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

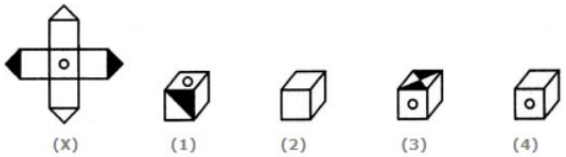
Q4. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:



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

Q5. Choose the box that is similar to the box formed from the given sheet of paper (X).



(a) 1 only (b) 2 only (c) 3 only (d) 4 only

Q6. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures:

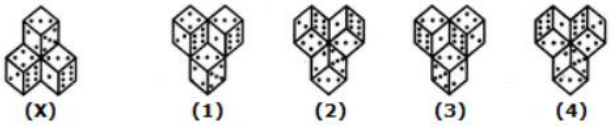
(A) (B) (C) (D) (E)

Answer Figures:

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

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

Q7. Choose the correct water image of the given figure (X) from amongst the four alternatives.

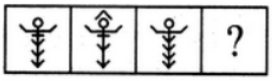


(X) (1) (2) (3) (4)

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

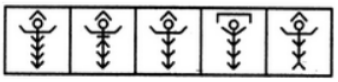
Q8. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:



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

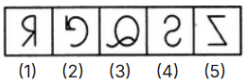
Answer Figures:



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

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

Q9. Choose the figure which is different from the rest.



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

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

Q10. Three different positions of a dice are shown below. How many dots lie opposite 2 dots?

(i) (ii) (iii)

(a) 1 (b) 3 (c) 5 (d) 6

Q11. Choose the figure which is different from the rest.

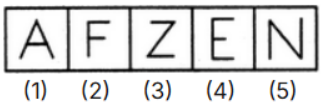
(1) (2) (3) (4) (5)

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

Q12. Choose the figure which is different from the rest.

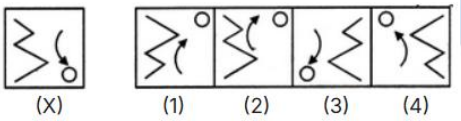
(a) 1 (b) 2 (c) 3 (d) 4 (e) 5

Q13. Choose the figure which is different from the rest.



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

Q14. Choose the correct mirror image of the given figure (X) from amongst the four alternatives.

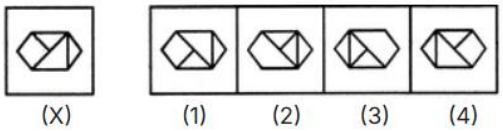


(a)1 (b) 2 (c) 3 (d) 4

Q15. Choose the box that is similar to the box formed from the given sheet of paper (X).

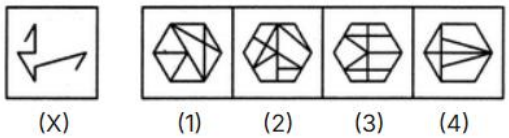
(a) 1 and 3 only (b) 2 and 4 only (c) 3 and 4 only (d) 1 and 4 only

Q16. Choose the correct mirror image of the given figure (X) from amongst the four alternatives.



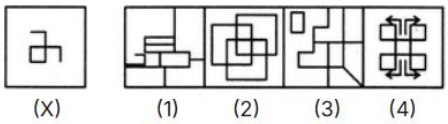
(a)1 (b) 2 (c) 3 (d) 4

Q17. Find out the alternative figure which contains figure (X) as its part.



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

Q18. Find out the alternative figure which contains figure (X) as its part.

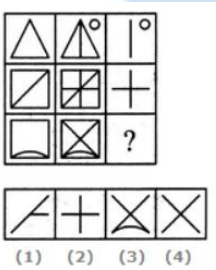


(a) 1 (b) 2 (c) 3 (d) 4

Q19. Identify the figure that completes the pattern.

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

Q20. Select a suitable figure from the four alternatives that would complete the figure matrix.



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

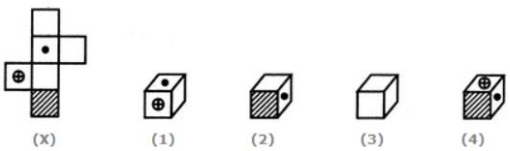
Q21. Select the alternative which represents three out of the five alternative figures which when fitted into each other would form a complete square.

(a) 123 (b) 124 (c) 135 (d) 145

Q22. Identify the figure that completes the pattern.

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

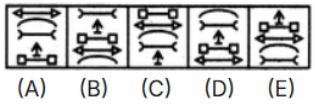
Q23. Choose the box that is similar to the box formed from the given sheet of paper (X).



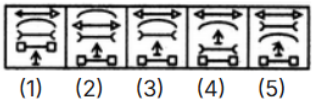
(a) 1 only (b) 1 and 3 only (c) 1, 3 and 4 only (d) 1, 2, 3 and 4

Q24. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures:



Answer Figures:



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

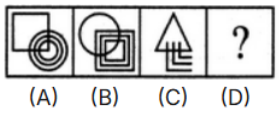
Q25. A dice is numbered from 1 to 6 in different ways.

If 1 is adjacent to 2, 3 and 5, then which of the following statements is necessarily true?

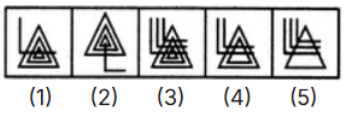
(a) 4 is adjacent to 6 (b) 2 is adjacent to 5 (c) 1 is adjacent to 6 (d) 1 is adjacent to 4

Q26. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:



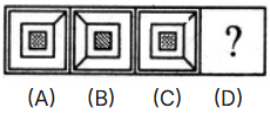
Answer Figures:



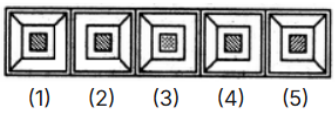
(a) 1 (b) 2 (c) 3 (d) 4 (e) 5

Q27. Select a suitable figure from the Answer Figures that would replace the question mark (?).

Problem Figures:



Answer Figures:



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

Direction for questions (28-31): The following questions are based on the information given below:

1. There is a cuboid whose dimensions are 4 x 3 x 3 cm.
2. The opposite faces of dimensions 4 x 3 are coloured yellow.
3. The opposite faces of other dimensions 4 x 3 are coloured red.
4. The opposite faces of dimensions 3 x 3 are coloured green.
5. Now the cuboid is cut into small cubes of side 1 cm.

Q28. How many small cubes will have only two faces coloured ?

(a) 12 (b) 24 (c) 16 (d) 12

Q29. How many small cubes have three faces coloured ?

(a) 24 (b) 20 (c) 16 (d) 8

Q30. How many small cubes will have no face coloured ?

(a) 1 (b) 2 (c) 4 (d) 8

Q31. How many small cubes will have only one face coloured ?

(a) 10 (b) 12 (c) 14 (c) 18

Directions for questions (32-36): The following questions are based on the information given below:

All the opposite faces of a big cube are coloured with red, black and green colours. After that is cut into 64 small equal cubes.

Q32. How many small cubes are there where one face is green and other one is either black or red ?

(a) 28 (b) 8 (c) 16 (d) 24

Q33. How many small cubes are there whose no faces are coloured ?

(a) 0 (b) 4 (c) 8 (d) 16

Q34. How many small cubes are there whose 3 faces are coloured ?

(a) 4 (b) 8 (c) 16 (d) 24

Q35. How many small cubes are there whose only one face is coloured ?

(a) 32 (b) 8 (c) 16 (d) 24

Q36. How many small cubes are there whose at the most two faces are coloured ?

(a) 48 (b) 56 (c) 28 (d) 24

Q37. What is the maximum number of identical pieces a cube can be cut into by 7 cuts?

(a) 36 (b) 49 (c) 25 (d) 56

Q38. 64 smaller but identical cubes are placed on a table to form a large. How many more such smaller cubes are required to enclose this large cube placed on this table completely?

(a) 125 (b) 116 (c) 100 (d) 132

Q39. What is the least number of identical cuboids, each of dimensions 2cmx 4 cm x 5cm, that are required to forma cube?

(a) 160 (b) 240 (c) 220 (d) 200

Q40. What is the least number of cuts required to cut a cube into 24 identical pieces?

(a) 2 (b) 4 (c) 6 (d) 8

Answer key

1	E	9	B	17	D	25	A	33	C
2	C	10	C	18	B	26	A	34	B
3	C	11	D	19	D	27	A	35	D
4	C	12	A	20	D	28	C	36	B
5	D	13	D	21	D	29	D	37	A
6	C	14	C	22	B	30	B	38	B
7	B	15	A	23	A	31	A	39	D
8	C	16	D	24	C	32	C	40	C