The world is a better place thanks to people who want to develop and lead others. What makes it even better are people who share the gift of their time to mentor future leaders. Thank you to everyone who strives to grow and help others grow. It is the professional version of The Lion King song, "Circle of Life."

To all the individuals I have had the opportunity to lead, be led by, or watch their leadership from afar, I want to say thank you for being the inspiration and foundation for Crack Every Test.

Without the experiences and support from my peers and team at Crack Every Test, this book would not exist. You have given me the opportunity to be a part of a group of individuals—to be a leader of great future professionals is a blessed place to be. Thank you to Riya D., Priya V., Rohan C., Shweta M., Sudhanshu M., Pritesh P., Sejal C., Ashitosh K., Tejas D., Bhavika B., Shreya S., Prashant P., Rohan P., Harsh K., Krupali S.,

Having an idea, finding the right references and turning it into a book is much harder than it sounds. The experience is both internally challenging and rewarding. I especially want to thank the various sources all over the internet and various institutes that we drew the inspiration from and that helped make this happen.

I also thank, heartily my family and mentors who have been instrumental in helping us through this journey for making Crack Every Test reach to the point where it has, thereby enabling us to help and influence life of thousands of students for the betterment of their futures.

And lastly but most importantly, I thank you, the students who are using these books to prepare for putting your trust in us. I assure, we at Crack Every Test will do everything in our power to give you the best guidance and will work hard to build your future.

Jigar Parekh
 Founder, Crack Every Test
 JBIMS,22

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ABSTRAC

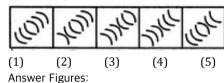
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| Abstract: Series | 3 |
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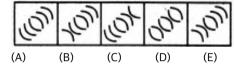


Exercise - 1

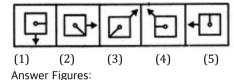
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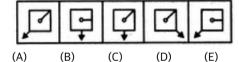
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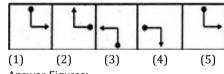


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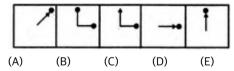




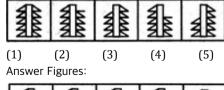
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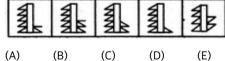


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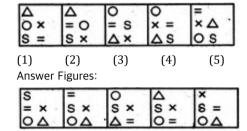


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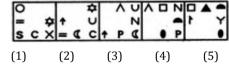
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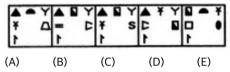


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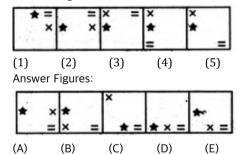
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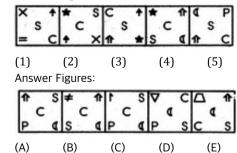
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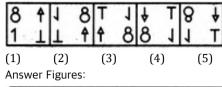
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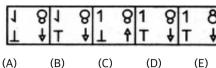


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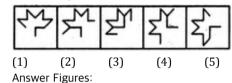


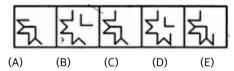




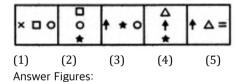


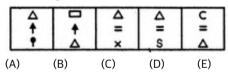
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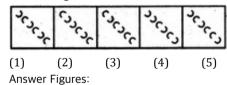


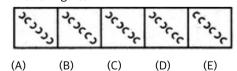
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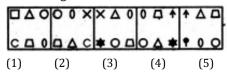


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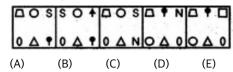




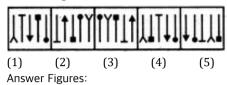
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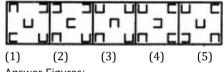


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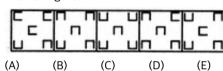




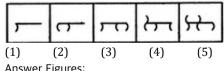
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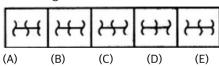
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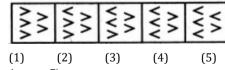
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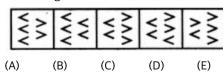
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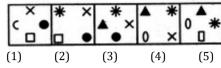


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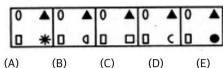




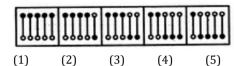
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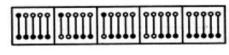
Answer Figures:



19. Problem Figures:



Answer Figures:



(C)

(D)

(4)

(E)

(5)

20. Problem Figures:

(B)

(A)



(3)

(1) (2) Answer Figures:



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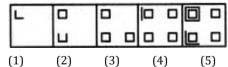
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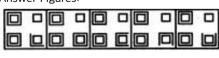
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Answer Figures:

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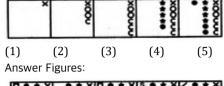


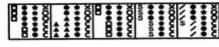
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22. Problem Figures:





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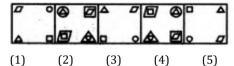
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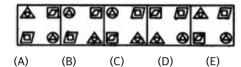
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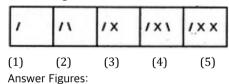
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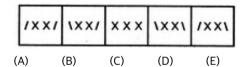


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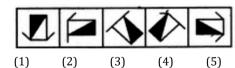


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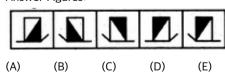




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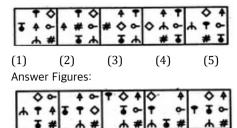


Answer Figures:





26. Problem Figures:



(C)

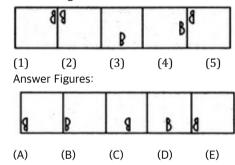
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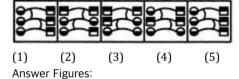
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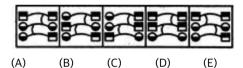
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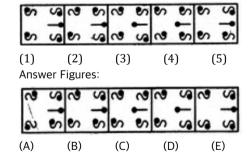


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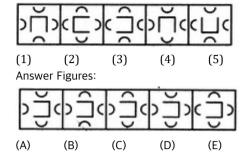




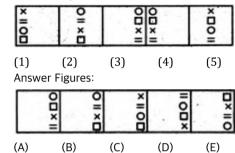
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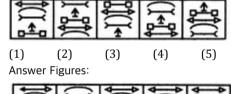
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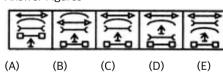


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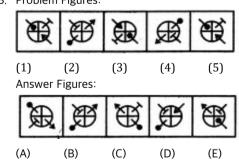


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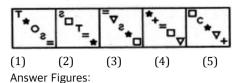


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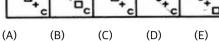




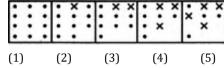
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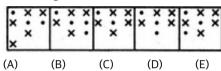
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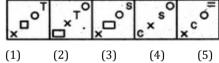
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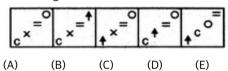
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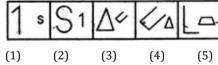
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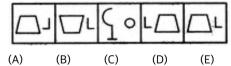
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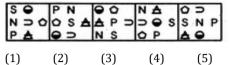
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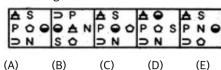
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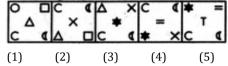
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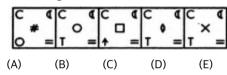
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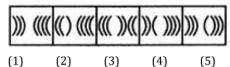
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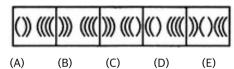
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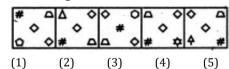
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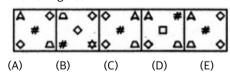
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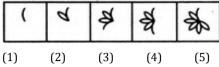


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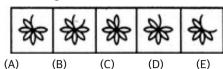




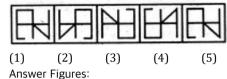
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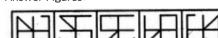


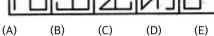
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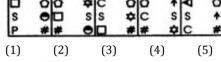
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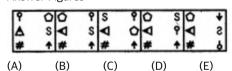




44. Problem Figures:



Answer Figures:



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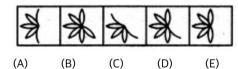


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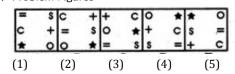
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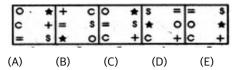
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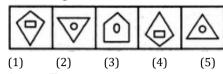
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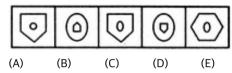
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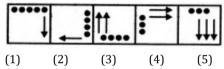
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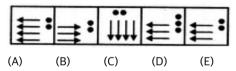
Answer Figures:



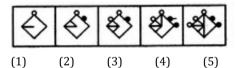
48. Problem Figures:



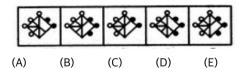
Answer Figures:



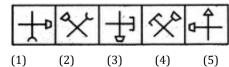
49. Problem Figures:



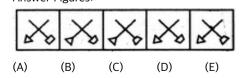
Answer Figures:



50. Problem Figures:



Answer Figures:





ANSWER KEY:

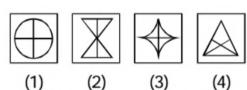
| 1) C | 11) D | 21) E | 31) C | 41) A |
|-------|-------|-------|-------|-------|
| 2) C | 12) C | 22) C | 32) C | 42) A |
| 3) C | 13) A | 23) E | 33) B | 43) D |
| 4) B | 14) C | 24) E | 34) C | 44) B |
| 5) B | 15) A | 25) C | 35) C | 45) D |
| 6) D | 16) C | 26) E | 36) C | 46) D |
| 7) E | 17) B | 27) A | 37) E | 47) C |
| 8) C | 18) B | 28) A | 38) A | 48) E |
| 9) D | 19) E | 29) B | 39) D | 49) B |
| 10) C | 20) C | 30) D | 40) B | 50) E |



ABSTRACT REASONING: ODD MAN OUT

Exercise - 1

Directions: (Q 1- Q 50) Which figure is the odd one out?



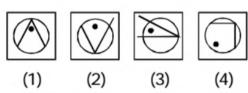
A. (1)

C. (3)

B. (2) D. (4)

E. None of these

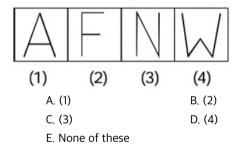
2.



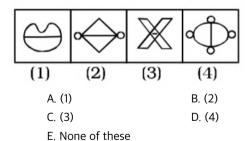
A. (1) C. (3) B. (2) D. (4)

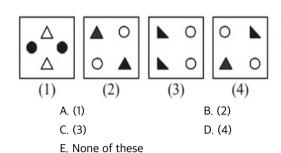
E. None of these

3.

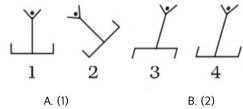


4.





6.

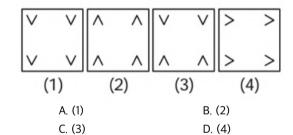


C. (3)

D. (4)

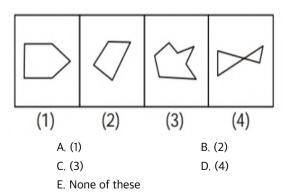
E. None of these

7.



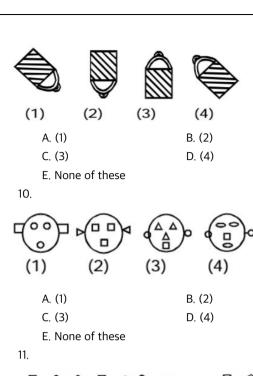
E. None of these

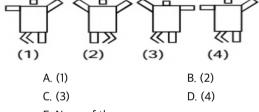
8.



9.

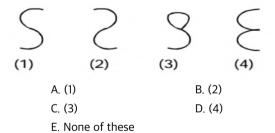




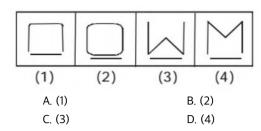


E. None of these

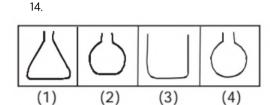
12.



13.



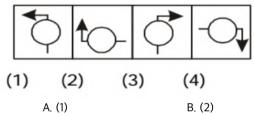
E. None of these



A. (1) B. (2) C. (3) D. (4)

E. None of these

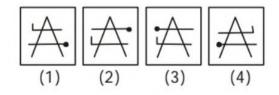
15.



C. (3) D. (4)

E. None of these

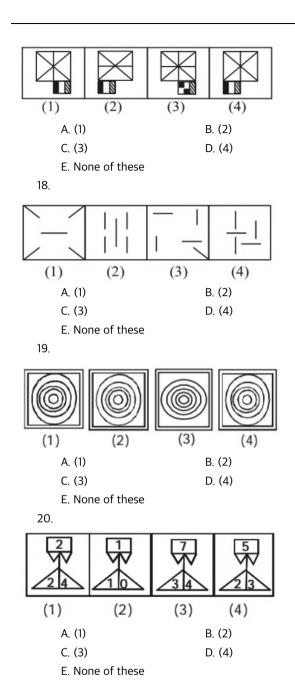
16.

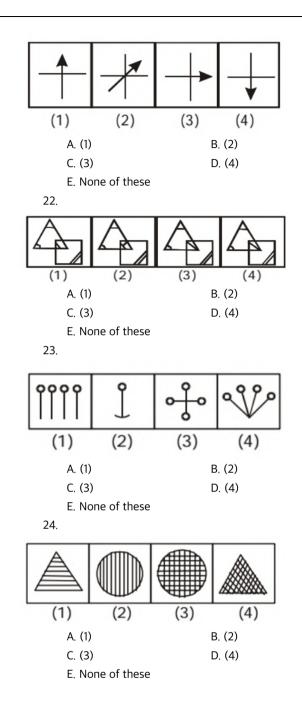


A. (1) B. (2) C. (3) D. (4)

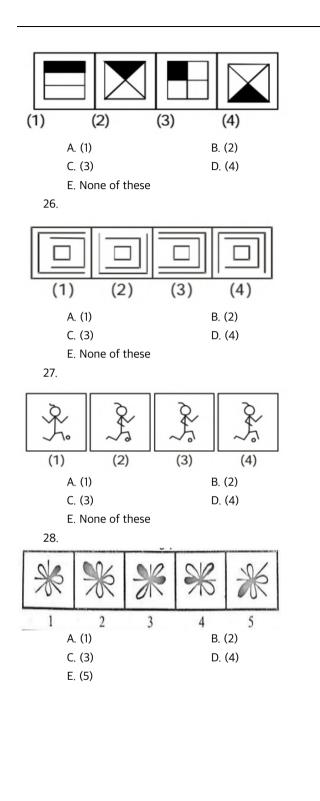
E. None of these

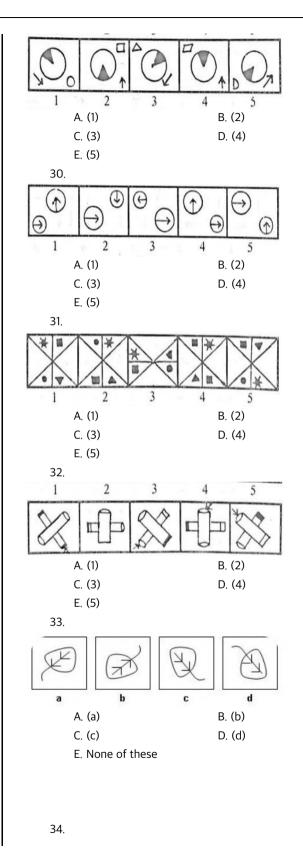




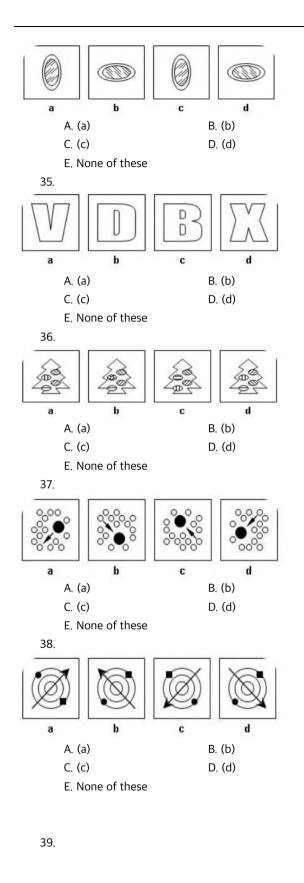


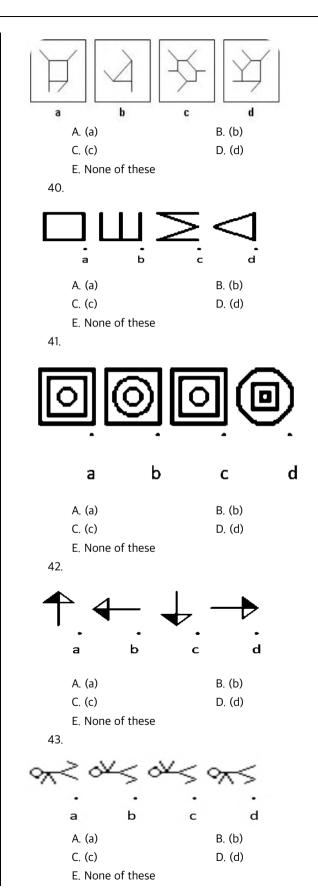




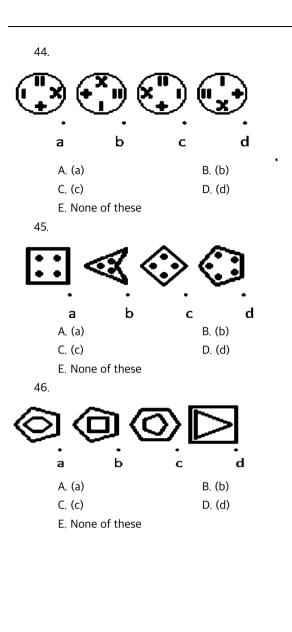


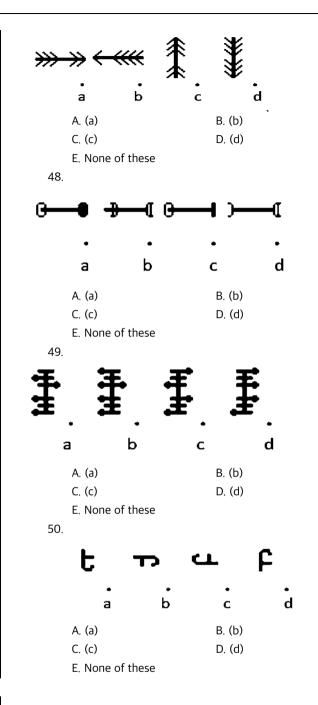














ANSWER KEY:

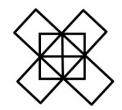
| 1) D 11) C 21) B 31) D 41) B 2) D 12) C 22) B 32) B 42) C 3) D 13) A 23) B 33) D 43) D 4) A 14) C 24) D 34) D 44) A 5) D 15) A 25) A 35) A 45) B 6) C 16) C 26) C 36) B 46) A 7) C 17) C 27) A 37) A 47) D 8) A 18) B 28) C 38) D 48) B 9) E 19) C 29) D 39) C 49) B 10) D 20) A 30) C 40) D 50) A | | | | | |
|--|-------|-------|-------|-------|-------|
| 3) D 13) A 23) B 33) D 43) D 43) D 43) D 44) A 14) C 24) D 34) D 44) A 45) B 5) D 15) A 25) A 35) A 45) B 6) C 16) C 26) C 36) B 46) A 7) C 27) A 37) A 47) D 8) A 18) B 28) C 38) D 48) B 9) E 19) C 29) D 39) C 49) B | 1) D | 11) C | 21) B | 31) D | 41) B |
| 4) A 14) C 24) D 34) D 44) A 5) D 15) A 25) A 35) A 45) B 6) C 16) C 26) C 36) B 46) A 7) C 17) C 27) A 37) A 47) D 8) A 18) B 28) C 38) D 48) B 9) E 19) C 29) D 39) C 49) B | 2) D | 12) C | 22) B | 32) B | 42) C |
| 5) D 15) A 25) A 35) A 45) B 6) C 16) C 26) C 36) B 46) A 7) C 17) C 27) A 37) A 47) D 8) A 18) B 28) C 38) D 48) B 9) E 19) C 29) D 39) C 49) B | 3) D | 13) A | 23) B | 33) D | 43) D |
| 6) C 16) C 26) C 36) B 46) A 7) C 17) C 27) A 37) A 47) D 8) A 18) B 28) C 38) D 48) B 9) E 19) C 29) D 39) C 49) B | 4) A | 14) C | 24) D | 34) D | 44) A |
| 7) C 17) C 27) A 37) A 47) D 8) A 18) B 28) C 38) D 48) B 9) E 19) C 29) D 39) C 49) B | 5) D | 15) A | 25) A | 35) A | 45) B |
| 8) A 18) B 28) C 38) D 48) B 9) E 19) C 29) D 39) C 49) B | 6) C | 16) C | 26) C | 36) B | 46) A |
| 9) E 19) C 29) D 39) C 49) B | 7) C | 17) C | 27) A | 37) A | 47) D |
| | 8) A | 18) B | 28) C | 38) D | 48) B |
| 10) D 20) A 30) C 40) D 50) A | 9) E | 19) C | 29) D | 39) C | 49) B |
| | 10) D | 20) A | 30) C | 40) D | 50) A |



ABSTRACT REASONING: MISCELLANEOUS

Exercise - 1

1. Find the number of squares?



A. 18

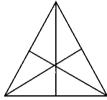
B. 10

C. 12

D. 15

E. None of these

Find the number of triangles?



A. 15

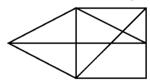
B. 12

C. 16

D. 7

E. None of these

Find the number of triangles?



A. 15

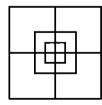
B. 13

C. 12

D. 14

E. None of these

Find the number of squares?



A. 13

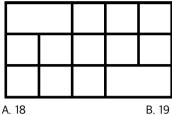
B. 15

C. 17

D. 14

E. None of these

Find the number of squares?

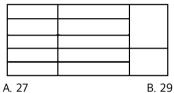


C. 12

D. 10

E. None of these

Find the number of rectangles?

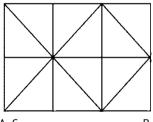


C. 28

D. 32

E. None of these

Find the number of square?



A. 6

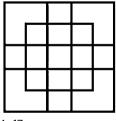
B. 9

C. 7

D. 10

E. None of these

How many squares in the figure?



A. 17

B. 16

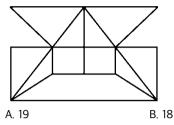
C. 27

D. 26

E. None of these



How many straight lines in the figure?

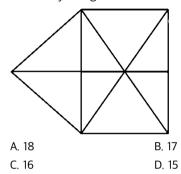


E. None of these

C. 17

10. How many triangles are in the sketch?

D. 15

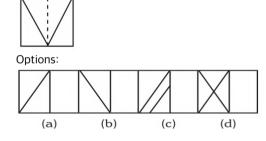


E. None of these

Directions(11-20):

Find out from the four alternatives as how the pattern would appear when the transparent sheet is folded at the dotted line.

11.

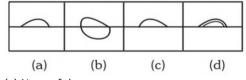


(e) None of these

12.



Options:

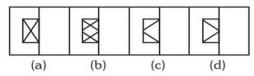


(e) None of these

13.



Options:

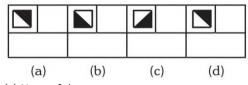


(e) None of these

14.



Options:

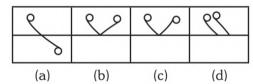


(e) None of these

15.



Options:

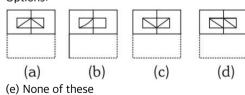


(e) None of these

16.



Options:

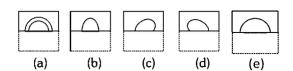


17.



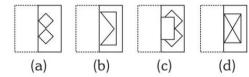
Options:







Options:

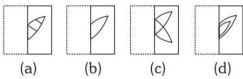


E. None of these

19.



Options:

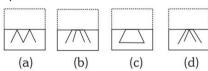


(e) None of these

20.



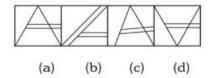
Options:



- e) None of these
- 21. Following question has five alternatives, among which one completes the figures.



Options:

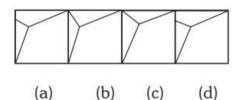


(e) None of these

22. Select the correct figure from the given Answer Figure that would complete the Question figure.



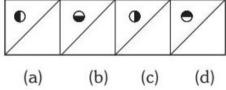
Options:



- (e) None of these
- 23. Select the correct figure from the Answer Figure that would complete the Question Figure.



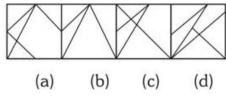
Options:



- (e) None of these
- 24. Following Question has five alternatives, among which one completes the figures



Options:

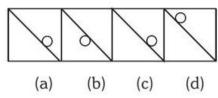


- (e) None of these
- 25. Following Question has five alternatives, among which one completes the figures



Options:



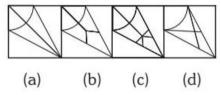


(e) None of these

26. Select a suitable figure from the five alternatives that would complete the figure.



Options:

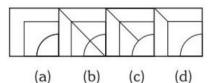


(e) None of these

27. Select a suitable figure from the five alternatives that would complete the figure.



Options:

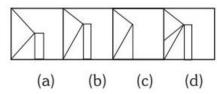


(e) None of these

28. Following Question has five alternatives, among which one completes the figures.



Options:

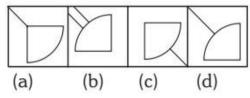


(e) None of these

29. Following Question has five alternatives, among which one completes the figures.



Options:

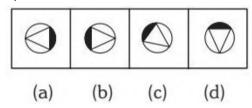


(e) None of these

30. Select the correct figure from the given Answer Figure that would complete the Question figure.



Options:



(e) None of these

Direction (31-38):

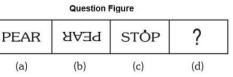
Each of the following questions consists of two sets of figures. Figures (a), (b), (c) and (d) constitute the Question Set while figures (1), (2), (3), (4) and (5) constitute the Answer Set, There is a definite relationship between figures (a) and (b).

Figure (a) and (b) are related in a particular way or manner. Establish the same relationship between (c) and (d).

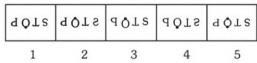
Mark the options as:

A. 1 B. 2 C. 3 D. 4 E. 5

> 31. Select a suitable figure from the answer figures that would replace the question mark (?) from question figure.

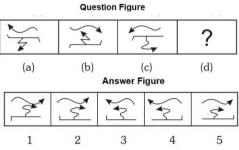


Answer Figure

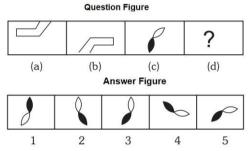




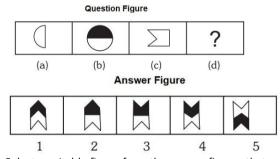
32. Select a suitable figure from the Answer Figures that would replace the question mark (?) from question figure.



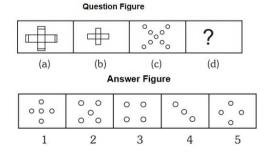
33. Select a suitable figure from the Answer Figures that would replace the question mark (?) from question figure.



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

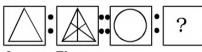


35. Select a suitable figure from the answer figures that would replace the question mark (?) from question figure.

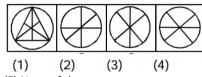


36. Select a suitable figure from the answer figures that would replace the question mark (?) from question figure.

Question Figures:

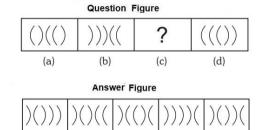


Answer Figures:



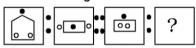
(5) None of these

37. Select a suitable figure from the answer figures that would replace the question mark (?) from question figure.

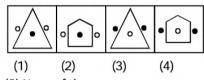


38. Select a suitable figure from the answer figures that would replace the question mark (?) from question figure.

Question Figures:

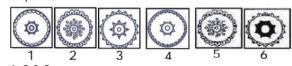


Answer Figures:



(5) None of these

39. Identify the two figures which are similar in all respects.



A. 3 & 6

B. 1 & 4

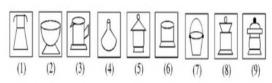
C. 2 & 4

D. 2 & 5

E. None of these



40. A series of figures is given which can be grouped into classes. Select the group into which the figures can be classified from the given response.



A. 1, 4, 7, 2, 5, 9, 3, 8, 6

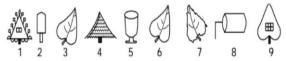
B. 2, 6, 9, 1, 4, 7, 5, 8, 3

C. 1, 4, 7, 2, 3, 6, 5, 8, 9

D. 3, 5, 1, 4, 7, 8, 6, 2, 9

E. None of these

41. In question, a series of figures are given which can be grouped into classes. Select the group into which the figures can be classified from the given responses.



A. 1, 4, 9; 2, 5, 8; 3, 6, 7

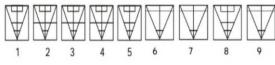
B. 2, 5, 8; 1, 4, 6; 3, 7, 9

C. 3, 6, 7; 2, 5, 8; 1, 2, 9

3, 6, 9; D. 2, 5, 8; 4, 6, 7

E. 2, 6, 8; 3, 5, 7; 4, 6, 9

42. A series of figures are given which can be grouped into classes. Select the group into which the figures can be classified from the given responses.



A. 1, 2, 3; 4, 5, 8; 6, 9, 7

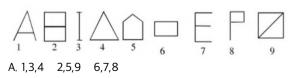
B. 1, 2, 5; 3, 4, 8; 6, 7, 9

C. 1, 2, 6; 3, 4, 7; 5, 6, 9

D. 1, 5, 8; 2, 3, 4; 6, 7, 9

E. 1, 3, 5; 2, 7, 8; 6, 4, 9

43. A series of figures are given which can be grouped into classes. Select the group into which the figures can be classified.



B. 1,2,3 4,5,6 7,8,9 C. 1,5,9 2,4,7 3,6,8

D. 3,7,8 1,6,5 4,2,9

E. None of these

44. A series of figures are given which can be grouped into classes. From the responses, select the groups into which the figures can be classified.



2, 5, 8; A. 1, 4, 7; 3, 6, 9

2, 6, 8; 3, 7, 9 B. 1, 4, 5;

C. 1, 7, 9; 3, 5, 8; 2, 4, 6

D. 1, 6, 9; 2, 5, 8; 3, 4, 7

E. None of these

45. A series of figures is given which can be grouped into classes. Select the group into which the figure can be classified from the given responses



A. 789, 243, 156

B. 132, 457, 689

C. 168, 347, 259

D. 169, 347, 258

E. None of these

46. A series of figures are given which can be grouped into classes. Select the group into which the figures can be classified from the given responses



A. 1, 4, 5; 2, 6, 8; 3, 7, 9

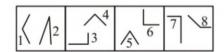
B. 1, 3, 7; 4, 6, 9; 2, 5, 8

C. 1, 3, 7; 2, 5, 8; 4, 6, 9

D. 1, 3, 8; 2, 5, 7; 4, 6, 9

E. None of these

47. A series of figures are given which can be grouped into classes. Select the group into which the figures can be classified from the given responses.



A. 2, 4, 5, 7; 1, 3, 6, 8

B. 1, 4, 5, 8; 2, 3, 6, 7

C. 2, 3, 5, 7; 1, 4, 6, 8

D. 1, 2, 5, 8; 3, 4, 6, 7



- E. None of these
- 48. A series of figures are given which can be grouped into classes. Select the groups into which the figures can be classified from the given responses



A. 1, 7, 8; 2, 6, 5; 3, 4, 9

B. 1, 8, 9; 2, 3, 5; 4, 6, 7

C. 2, 3, 5; 1, 7, 8; 4, 6, 9

D. 2, 6, 7; 1, 3, 4; 5, 8, 9

E. None of these

49. A series of figures are given which can be grouped into classes. Select the groups into which the figures can be classified from the given responses.



A. 1, 4, 8; 2, 5, 7; 3, 9, 6

B. 1, 4, 6; 2, 5, 8; 3, 7, 9

C. 1, 4, 6; 2, 5, 7; 3, 8, 9

D.1, 2, 3; 4, 5, 6; 7, 8, 9

E. None of these

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

Problem Figure (d) (a) (b) (c) (e) B. (b)

A. (a)

C. (c) E. (e)

D. (d)



ANSWER KEY:

| 1) B | 11) B | 21) A | 31) A | 41) A |
|-------|-------|-------|-------|-------|
| 2) C | 12) A | 22) C | 32) B | 42) D |
| 3) A | 13) E | 23) A | 33) A | 43) A |
| 4) B | 14) B | 24) B | 34) C | 44) A |
| 5) B | 15) B | 25) B | 35) B | 45) D |
| 6) E | 16) A | 26) B | 36) C | 46) D |
| 7) B | 17) E | 27) C | 37) E | 47) D |
| 8) C | 18) E | 28) B | 38) A | 48) B |
| 9) D | 19) C | 29) D | 39) D | 49) B |
| 10) B | 20) A | 30) A | 40) C | 50) A |



ABSTRACT SERIES SOLUTIONS

1. Answer: C

Solution

One arc and four arcs get inverted alternately.

2. Answer: C

Solution

The pin rotates 45°CW and 90°CW alternately and moves one space (each space is equal to half-a-side of the square) and two spaces CW alternately. The arrow rotates 90°ACW and 45°ACW alternately and moves two spaces and one space.

3. Answer: C

Solution

In each step, the pin rotates 90°CW and the arrow rotates 90°ACW.

4. Answer: B

Solution

In one step, the figure gets laterally inverted and one line segment is lost from the upper end of the RHS portion of the figure. In the next step, the figure gets laterally inverted and one line segment is lost from the upper end of the LHS portion of the figure.

5. **Answer:** B

Solution

The elements move in the



and 😧

alternate

6. **Answer:** D

Solution

All the elements move half-a-side of the square boundary in ACW direction in each step. Also, first, third and fifth elements are replaced by new elements in one step and second, fourth and sixth elements are replaced by new elements in the next step. The two steps are repeated alternately.

7. Answer: E

Solution

In the first step, the ACW end element moves two spaces (each space is equal to half-a-side of the square boundary) in an ACW direction. In the second step, the CW-end element moves three spaces ACW.

In the third step, the remaining element moves four spaces ACW. The three steps are repeated to continue the series.

8. Answer: C

Solution

The symbols move in the sequence in the first step. In each subsequent step, the symbols move in the sequence obtained by rotating the previous sequence through 90°ACW. Also, in each step, the symbol that reaches the encircled position gets replaced by a new one.

9. Answer: D

Solution

In each step, all the elements move to the adjacent corner (of the square boundary) in a CW direction and the element that reaches the upper-left corner gets vertically inverted

10. Answer: C

Solution

In each step, one line segment is lost from the CWend of the outer element and a new line segment appears at the ACW-end. Also, the inner 'L' shaped element rotates 90°CW in each step.

11. Answer: D

Solution

In each step, the first element moves to the third position and gets replaced by a new element; the second and the third elements move to the first and the second positions respectively and the entire figure rotates 90° CW.

12. Answer: C

Solution

We can label the arcs as shown _______6. The arc get inverted in the sequence (1 & 2), (3, 4 & 5), (6 & 1), (2, 3 & 4), (5 & 6),...........

13. **Answer:** A

Solution





The elements move in the





Also, in each step, the symbol that reaches the encircled position, gets replaced by a new symbol.

14. Answer: C

Solution

In one step, all the elements get vertically inverted



and interchange positions in the sequence

. In the next step, the elements interchange positions



in the sequence

and the third element

gets vertically inverted.

Answer: A

Solution

Three elements (encircled in-the figures below) rotate through 90°CW in each step. This rotation takes place in the following sequence









. In Ist step In IInd step In IIIrd step In IVth step

This sequence is repeated to continue the series.

16. Answer: C

Solution

In each step, all the existing arcs get laterally inverted and a new arc is added which is oriented in a direction opposite to that of the last added arc. The arcs are added at various positions in the following sequences:



17. **Answer:** B

Solution

In each step, one of the elements-gets laterally inverted.

18. Answer: B

Solution

All the symbols move CW half the side of the square in each step. The symbols are replaced by new ones sequentially in an ACW direction.

19. **Answer:** E

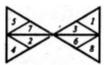
Solution

One of the pins gets inverted in each step. The pins get inverted sequentially from right to left

20. Answer: C

Solution

The shading moves in the sequence as shown in the figure:



The similar upper element appears in every fourth step. The lower element is replaced by a new element in every second step.

21. Answer: E

Solution

Five line segments are added in each step to complete the squares in an ACW direction.

22. Answer: C

Solution

The number of symbols added sequentially is 3, 2, 5, 2, 7, 2, These symbols are added to form a sequence of 1, 2, 3, 4, 5, 6 identical symbols.

23. Answer: E

Solution

Similar figure appears alternately and each time a figure reappears, all the elements move one step CW.

24. Answer: E

Solution

One extra line is added in each step in a set order.

25. Answer: C

Solution

Similar figure reappears in every fourth step and each time a figure reappears, it rotates through 90° ACW.

26. Answer: E

Solution

In one step, the elements move in the sequence







and in the next step, the elements move in the sequence



The two steps are repeated alternately.

27. Answer: A

Solution

The symbol gets vertically inverted and laterally inverted alternately. It also moves in ACW direction through distances equal to two half-sides (of square boundary) and three half-sides alternately.

28. Answer: A

Solution

The elements interchange positions in the





alternately.

29. Answer: B

Solution

The upper-left element gets laterally inverted in first, third, fifth. steps; the upper-right element gets rotated through 180° is first, fourth, seventh,.... steps; the lower-left element gets laterally inverted in second, fourth, sixth, ... steps; the lower-right element gets rotated through 180° in third, sixth,... steps and the pin at the middle-right position gets laterally inverted in every second step.

30. Answer: D

Solution

Three and two arcs are inverted alternately. The central element rotates 90° ACW and 180° alternately.

31. Answer: C

Solution

All the elements together move one space to the right in each step and once they reach the rightmost position, then in the next step, they move to the leftmost position. Also, in the first step, the first

(uppermost) and the third elements interchange positions; in the second step, the second and the fourth elements interchange positions and in the third step, none of the elements interchange positions. These three steps are repeated to continue the series.

32. Answer: C

Solution

In each step, the elements move in the



order

33. Answer: B

Solution

All the elements move one space ACW (each space is equal to a quadrant of the circle) and get inverted in each step.

34. Answer: C

Solution

In each step, the symbols move in the sequence



and the symbol that reaches the encircled position gets replaced by a new one.

35. Answer: C

Solution

In each step, one dot is lost while another dot is replaced by a cross.

36. Answer: C

Solution

The elements move in the sequences





alternately. Also, in each step, the element that reaches the encircled position, gets replaced by a new element.





37. Answer: E

Solution

In one step, the two elements interchange positions and the smaller element gets enlarged while the larger element gets reduced in size. In the next step, the smaller element is replaced by a new small element and the larger element is replaced by a new large element.

38. Answer: A

Solution

In each step, all the symbols move in the



sequence

39. Answer: D

Solution

The symbols move in the sequences



and



alternately. In each step, the symbol that reaches the-encircled position gets replaced by a new symbol.

40. Answer: B

Solution

Two, three, four, two, three, ... curves get inverted sequentially.

41. Answer: A

Solution



The symbols move in the sequence

first step. In each subsequent step, the symbols move in the sequence obtained by rotating the previous sequence through 90°CW. Also, in each step, the symbol that reaches the encircled position gets replaced by a new one.

42. Answer: A

Solution

Two and three half-leaves are added to the figure alternately. The addition of half-leaves takes place in an ACW direction.

43. Answer: D

Solution

The figure gets laterally inverted and vertically inverted alternately.

44. Answer: B

Solution

The symbols move in the





alternately, Also,

the symbol at the encircled position is replaced by a new one in each step.

45. Answer: D

Solution

In one step, a half-leaf is added to the figure at the ACW-end. In the next step, two half-leaves are added to the figure - one at the ACW-end and the other at the CW-end. Also, in each step, the figure rotates 45°ACW.

46. Answer: D

Solution

The symbols '=', '+' and '*' move one step ACW While the symbols 's', 'c' and 'o' move one step CW each time.

47. Answer: C

Solution

Similar figure repeats in every third step and each time a figure reappears it gets vertically inverted.

48. Answer: E

Solution

In each step, all the existing elements move to the adjacent side (of the square boundary) in a CW direction. The number of black circles decreases by one in first, third, fifth, steps and the number of arrows increases by one in second, fourth, sixth,... steps

49. Answer: B

Solution



In one step, a black circle is added to the figure at the CW-end of the existing circles and a line segment is added on the upper side. In the next step, a white circle is added to the figure at the ACW-end of the existing circles and a line segment is added on the lower side.

50. Answer: E

Solution

The element having trapezium at its end, rotates 135°ACW and the trapezium gets inverted in each step. The other element rotates 135°ACW in one step and it rotates 45°CW and the symbol at its end gets replaced by a new element in the next step.







ABSTRACT ODD MAN OUT SOLUTIONS

1. Answer: D.

Solution

Except figure (4) all others have been divided into four equal parts.

2. Answer: D.

Solution

As we can see that

Except figure (4), in all other figures the two-line segments form an acute angle.

3. Answer: D.

Solution

All other designs have been made of three-line segments whereas figure (4) has been made up of four-line segments.

Answer: A.

Solution

As we can see that in all other figures there are two similar designs joined together. But, figure (1) is different to others.

Answer: D.

Solution

Except in figure (4), in all other figures only two types of designs are given.

Answer: C. 6.

Solution

As we can see that figure (3) is different from the other three.

The lower line segment is inverted in figure (3).

7. Answer: C.

Solution

As we can see that,

Except in figure (3), in all other figures all the four designs face the same direction.

Answer: A. 8.

Solution

Except figure (1) all others are irregular. Figure (1) is a regular pentagon. So, figure (1) is

correct answer.

Answer: E

Solution

All the figures follow a similar pattern.

Answer: D. (4) 10.

Solution

The ears of the rest of the three are same. But the right ear of figure (4) is different.

Answer: C. (3)

Solution

The hands of the rest of the three are not alike. But figure (3) is different to all three figures.

12. Answer: C. (3)

Solution

As we can see that Figure (3) has one closed end. So, required answer is option C.

Answer: A. (1) 13.

Solution

Except figure (1), all other figures have five sides 1.

14. Answer: C. (3)

Solution

All other figures have small opening. But figure (3) is different to others.

Answer: A. (1) 15.

Solution

Except in figure (1), in all other figures the arrow is pointing clockwise. So, figure (1) is correct.

16. Answer: C. (3)

Solution

Except in figure (3), all other figures the line segments point differently.

17. Answer: C. (3)

Solution

In figure (3) the orientation of lower design is different, So, figure (3) is odd.

18. Answer: B. (2)

Solution

Except in figure (2), in all other figures all the five segments are of equal length.

Answer: C. (3) 19.

Solution

In figure (3) all circles are concentric. But all other figures are in same.

20. Answer: A. (1)

Except in figure (1) in all others the top number is the sum of the two bottom numbers.

Answer: B. (2)

Solution



Except in figure (2), in all other figures one line segment intersects one arrow at right angle.

22. Answer: B. (2)

Solution

In figure (2) there is one more line segment than the other figures. But all other figures are in same.

23. Answer: B. (2)

Solution

Except in figure (2), in all other figures there are four lines segments with small circle. But all other figures are different to figure (2).

24. Answer: D. (4)

Solution

As we can see that in all other figures there are horizontal and/or vertical lines. So, figure (4) is correct answer.

25. Answer: A. (1)

Solution

As we can see that in all other figures, one-fourth part of the design is shaded. In figure (1) only onethird part is shaded.

26. Answer: C. (3)

Solution

The open sides of the outer and middle designs face different directions except in figure (3). But all others are different to figure (3).

Answer: A. (1) 27.

Solution

Figure (1) is different from the others. But all other figures are different to figure (1).

28. Answer: C. (3)

Solution

Except 3, all other figure has 3 unshaded and one shaded leaf.

29. Answer: D. (4)

Solution

In all 4 elements direction of sector is same as arrow

30. Answer: C. (3)

Solution

Direction of arrow in figure 2 and 3 are same.

31. Answer: D. (4)

Solution

Figure (4) has a rectangle in place of a '+' sign.

32. Answer: B. (2)

Solution

All other figures have an arrow. Figure (2) does not.

33. Answer: D. (d)

Solution

The arrows present in the leaves are pointing inwards except figure d

Answer: D. (d) 34.

Solution

The number of line segments present are equal except in figure d.

35. Answer: A. (a)

Solution

The figures are horizontally symmetric except figure (a).

36. Answer: B. (b)

Solution

Every figure has lines in them except figure (b).

37. Answer: A. (a)

Solution

All figure's arrows are pointing towards the shaded circle except fig (a).

38. Answer: D. (d)

Solution

All the elements except in choice (d), follow a anti clockwise rotation.

39. Answer: C, (c)

Solution

Every figure of vertices is extended to a line except fig (c).

40. Answer: D. (d)

Solution

The triangle is the odd one out because it has only 3 lines segments. The other figures have 4-line segments.

41. Answer: B. (b)

Solution

The figure with 2 circles and 1 square is the odd one out. The other figures have 2 squares and 1 circle.

42. Answer: C. (c)

Solution

All other arrow heads are shaded on the left.

43. Answer: D. (d)

Solution

The figure where the foot is on the same side as the hands is the odd one out. In the other figures, the hands and the foot are on opposite sides.





44. **Answer:** A. (a)

Solution

The figure with the - sign following the + sign when one goes clockwise is the odd one out. In the other figures, the order of the signs is + x = - when one goes clockwise.

45. Answer: B. (b)

Solution

The arrowhead is the odd one out because it has 3 (rather than 4 dots) in it, In the other figures, the number of dots equals the number of sides the polygon has.

46. Answer: A. (a)

Solution

The figure with the hexagon inside the pentagon is the odd one out. In the other figures, the polygon inside has one side less than the polygon outside.

47. Answer: D. (d)

Solution

The figure with 6 pairs of slanting lines is the odd one out. In the other figures, there are 5 pairs of slanting lines.

Answer: B. (b) 48.

Solution

The line which does not have an object at both the ends is the odd one out. In the other figures, the lines have objects at the two ends.

49. **Answer:** B. (b)

Solution

The figure with 5 beads is the odd one out. In the other figures, there are 4 beads.

50. **Answer:** A. (a)

Solution

The figure with the mirror image of the letter "f" is the odd one out. In the other figures, the letter shown is "f" except for rotations through various angles.



ABSTRACT REASONING MISCELLANEOUS SOLUTIONS

31. Answer - A

Solution

The complete figure rotates through 180 degree.

32. Answer – B

Solution

The upper element moves 180 degree its head inverted and the lower one vertically inverted.

33. Answer - A

Solution

The figure rotates through 180 degrees.

34. Answer - C

Solution

The figure rotates 90-degree anti -clock wise and shaded inverted image added to the top.

35. Answer – B

Solution

Four parts of the outer end are lost,

36. Answer - C

Solution

From first figure to second figure three line segments are added in a set pattern out of them, one is vertical and rest are as per design in option (C).

37. Answer – E

Solution

The first, second and fifth arcs (counting from left to right) get laterally inverted.

38. Answer - A

Solution

From first figure to second, one side of the main design is deleted and the inner circles move out of the main design and the outer circle moves inside the main design.

39. Answer – D

Solution

Figure (2) and (5) are similar in all respects.

40. Answer – C

Solution

Figures (1), (4) and (7): Different types of pots Figures (2), (3) and (6): Pot with base and without lid Figures (5), (8) and (9): Pot with Lid

41. Answer – A

Solution

As per the given above figures, we get

Figures (1), (4) and (9): More or less triangular designs

Figures (2), (5) and (8): Design with curved

Figures (3), (6) and (7): Leaves

42. Answer – D

Solution

As per the given above figures, we can see that

Figures (1), (5) and (8) are similar.

Figures (2), (3) and (4) are similar.

Figures (6), (7) and (9) are similar.

43. Answer - A

Solution

As we can see that,

Figures (1), (3) and (4): having three sides.

Figures (2), (5) and (9): having five sides.

Figures (6), (7) and (8): having four sides.

44. Answer – A

Solution

As we can see that,

Figures 1, 4 and $7 \rightarrow \text{Vessels with lids}$

Figures 2, 5 and 8 → Kettle like vessels

Figure 3. 6 and $9 \rightarrow$ Flowers

45. Answer – D

Solution

As per the given series of figures, which can be classified as: -

Figures 1, 6 and $9 \rightarrow Triangles$

Figures 3, 4 and $7 \rightarrow Quadrilaterals$

Figures 2, 5 and 8 \rightarrow Consist of 5 sides

46. Answer - D

Solution

As per the given series of figures, which can be classified as: -

Figures 1, 3 and $8 \Rightarrow$ One big design and one smaller shaded design.

Figures 2, 5 and $7 \Rightarrow$ Each design has a black dot.

Figures 4, 6 and $9 \Rightarrow$ Two similar designs

47. Answer – D

Solution

As per the given series of figures, which can be classified as: -

The figures 1, 2, 5, and 8 are either acute or obtuse

The figures 3, 4, 6 and 7 are right angles.



48. Answer – B

Solution

On the basis of above given series of figures, which can be classified as: -

Figures (1), (8) and (9); Two black dots Figures (2), (3) and (5): One black dot Figures (4), (6) and (7): Three black dots

49. **Answer** – B

Solution

As we can see that,

Figures $(1, 4, 6) \Rightarrow$ There are two similar designs.

Figures $(2, 5, 8) \Rightarrow$ Irregular figures

Figures $(3, 7, 9) \Rightarrow$ The main design is divided into eight parts.

50. Answer – A

Solution

M is the only consonant, rest are vowels.



