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| <b>NTSE STAGE-I MAIN EXAM<br/>QUESTION PAPER</b> | <b>2020-21</b> |
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**PART-I : MENTAL ABILITY**

**Time: 120 Mins**

**Max. Marks: 100**

**Direction:** In question nos. **1** to **12** there is missing number shown by question mark (?). This term is one of the four alternatives given below the questions. Choose the correct alternative.

- |     |   |          |          |          |
|-----|---|----------|----------|----------|
| 1.  | 5, 6, 10, 19, 35, ?<br>(A) 55               | (B) 60   | (C) 51   | (D) 71   |
| 2.  | 6, 13, 29, 63, ?<br>(A) 126                 | (B) 113  | (C) 128  | (D) 133  |
| 3.  | 4, 8, 16, 32, 64, 128, ?<br>(A) 256         | (B) 228  | (C) 512  | (D) 192  |
| 4.  | 3, 5, 9, 17, 33, 65, ?<br>(A) 130           | (B) 98   | (C) 129  | (D) 132  |
| 5.  | 3, 6, 11, 18, 27, ?<br>(A) 48               | (B) 38   | (C) 36   | (D) 56   |
| 6.  | 2, 4, 12, 48, 240, ?<br>(A) 1440            | (B) 1200 | (C) 480  | (D) 960  |
| 7.  | 15, 18, 111, 114, 117, ?<br>(A) 125         | (B) 123  | (C) 121  | (D) 120  |
| 8.  | 33, 44, 35, ?, 37, 46, 39, 47....<br>(A) 36 | (B) 47   | (C) 45   | (D) 48   |
| 9.  | 41, 42, 50, 77, 141, ?<br>(A) 248           | (B) 266  | (C) 423  | (D) 218  |
| 10. | 4, 6, 10, 16, 24, ?<br>(A) 30               | (B) 40   | (C) 36   | (D) 34   |
| 11. | B, D, G, I, ?, N .....<br>(A) L             | (B) M    | (C) K    | (D) J    |
| 12. | A, CD, GHI, ?, UVWXY<br>(A) NOPQ            | (B) MNO  | (C) MNOP | (D) NOPQ |

**Directions :** In question nos. **13** to **22** there is a certain relationship between two given words on left side of :: symbol and one word is given on right hand side of :: and a question mark. Choose the correct alternative from options which shows the same relationship between these pairs of words as between the pair of words given on left hand side of :: symbol.

- 
13. Film : Producer : : Book : ?  
(A) Director (B) Publisher (C) Editor (D) Writer
14. Clock : Time : : Theremometer : ?  
(A) Heat (B) Radiation (C) Energy (D) Temperature
15. Ink : Pen : : Blood : ?  
(A) Vein (B) Donation (C) Accident (D) Doctor
16. Ship : Captain : : Aeroplane : ?  
(A) Air-hostess (B) Runway (C) Pilot (D) Airport
17. Bat : Ball : : Badminton : ?  
(A) Ball (B) Table (C) Court (D) Shuttle-cock
18. Mass : Kilogram : : Length : ?  
(A) Volt (B) Kelvin (C) Meter (D) Ampere
19. Country : President : : State : ?  
(A) Chief Minister (B) Governor (C) Primer Minister (D) Mayor
20. Day : Night : : Positive : ?  
(A) Negative (B) Sun (C) Moon (D) Number
21. BPR : DRT : : DMP : ?  
(A) ENP (B) EOP (C) FOR (D) FNQ
22. CLP : DOR : : JPT : ?  
(A) KQU (B) IMS (C) LQV (D) KSV
23. Bread is related to wheat in the same way as Brick is related to \_\_\_\_\_.  
(A) Fire (B) Clay (C) Cement (D) Smoke
24. Accident is related to carefulness in the same way as Disease is related to \_\_\_\_\_.  
(A) Treatment (B) Medicine  
(C) Absence of Sanitation (D) Doctor
25. Choose the odd one out from following.  
(A) Sun (B) Mars (C) Earth (D) Star
26. Choose the odd one out from following.  
(A) Tomato (B) Mango (C) Banana (D) Apple
27. Choose the odd one out from following.  
(A) Teacher (B) Office (C) Student (D) Class
28. Find the odd term.  
(A) 27 (B) 25 (C) 16 (D) 9
29. Find the odd one out.  
(A) Solid (B) Liquid (C) Gas (D) Water
-

30. Choose the odd one out.  
(A) Ear (B) Eye (C) Nose (D) Throat
31. In a language, POPULAR is coded as ONOTKZQ which word would be coded as GBNPVT ?  
(A) FAMOSU (B) FAMOUS (C) FASOUM (D) FOSAUM
32. In a certain code SIKKIN is written as THLJLL, how is TRAINING written in that code ?  
(A) SQBHOHOH (B) UQBJOHHO (C) UQBHOHOF (D) UQBJOHOH
33. If Z = 52, and ACT = 48, then TAB will be equal to -  
(A) 46 (B) 44 (C) 41 (D) 39
34. In a certain language CHAMPION is coded as HCMAIPNO, how is POSITIVE coded in that language ?  
(A) OPISITEV (B) POISITEV (C) OPSIITEV (D) OPISTIVE
35. If air is called 'blue', 'blue' is called 'sky', 'sky' is called 'yellow', 'yellow' is called 'water' and 'water' is called 'pink', then what is the colour of 'clear sky' ?  
(A) Blue (B) Yellow (C) Pink (D) Sky
36. Introducing a person to her husband, a woman said "his brother's father is the only son of my grandfather". How is the woman related to this person ?  
(A) Mother (B) Sister (C) Daughter (D) Aunt

**Directions : (Question 37 and 38)**

- (i) A + B means A is the son of B;  
(ii) A - B means A is the wife of B;  
(iii) A × B means A is the brother of B;  
(iv) A ÷ B means A is the mother of B;  
(v) A = B means A is the sister of B.

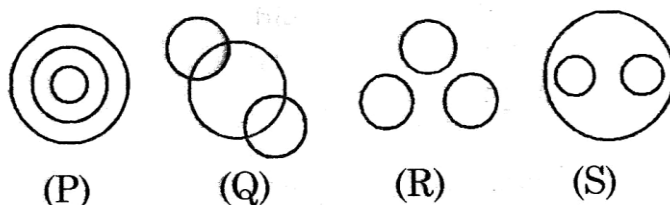
37. What does P + R - Q means ?  
(A) Q is the son of P (B) Q is the brother of P  
(C) Q is the father of P (D) Q is the uncle of P
38. What does P = R + Q means ?  
(A) P is the daughter of Q (B) P is the aunt of Q  
(C) P is the niece of Q (D) P is the sister of Q
39. Six students A, B, C, D, E and F are sitting in the field. A and B are from Gwalior, while the rest are from Bhopal. D and F are tall while others are short. A, C and D are girls while others are boys. Which is the tall girl from Bhopal?  
(A) C (B) D (C) E (D) F
40. Nitin ranks fifteen in a class of 39. What is his rank from the last ?  
(A) 23 (B) 24 (C) 25 (D) 26

**Direction :** Study the following number sequence and answer the Questions Nos. from 41 to 43.

41. How many pairs of successive numbers having difference of 2 ?  
(A) Five (B) Six (C) Seven (D) Eight

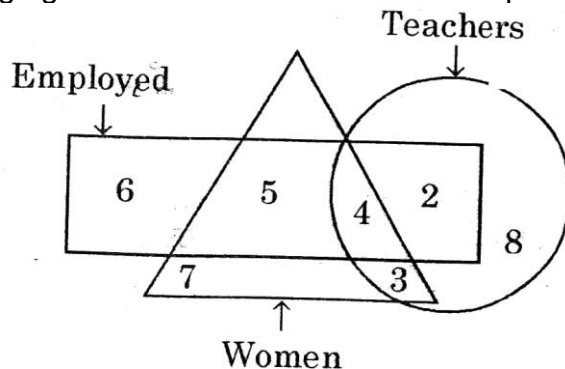
42. Figures which have frequency equal to 2 are from following -  
 (A) 1, 2, 3 (B) 2, 4, 7 (C) 4, 5, 6 (D) 5, 6, 8
43. How many numbers are in sequence which are written twice successively ?  
 (A) Three (B) Four (C) Five (D) Six
44. In the numbers from 100 to 1000, how many times digit 1 comes at the ten's place ?  
 (A) 9 (B) 10 (C) 90 (D) 900
45. If the numbers from 5 to 75, which are exactly divisible by 5 are arranged in descending order, which number would come at the 12<sup>th</sup> place from the bottom ?  
 (A) 45 (B) 50 (C) 55 (D) 60

**Direction :-** For Question Nos. **46 to 50**. Each of the questions from **46 to 50** contains three elements. These elements may or may not have inter linkage. Each group of the elements fit into one of the diagram given in (P), (Q), (R) and (S). You have to indicate the group of elements which correctly fits into



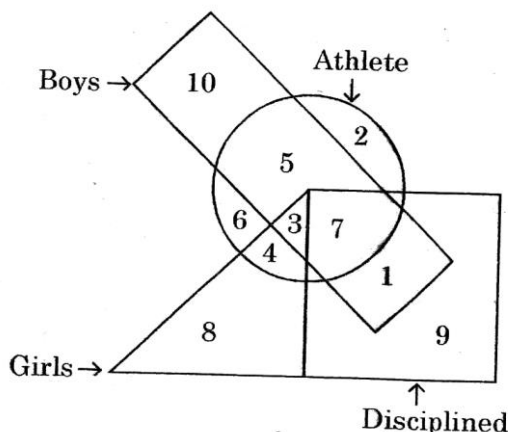
46. Fruit, Apple, Mango  
 (A) P (B) Q (C) R (D) S
47. Carrot, Food, Vegetables  
 (A) P (B) Q (C) R (D) S
48. Traveller, Train, Bus  
 (A) P (B) Q (C) R (D) S
49. Author, Lawyer, Singer  
 (A) P (B) Q (C) R (D) S
50. Truck, Ship, Goods  
 (A) P (B) Q (C) R (D) S

**Direction:** Study the following figure and choose the correct for questions from **51 to 53**.



51. Number of women teachers who are employed ?  
 (A) 6 (B) 5 (C) 4 (D) 3
52. Number of teacher, who are not employed ?  
 (A) 8 (B) 7 (C) 6 (D) 5
53. Number of women who are not teachers ?  
 (A) 7 (B) 9 (C) 10 (D) 12

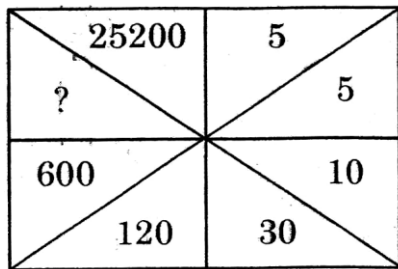
**Direction:-** Study the following diagram and choose the correct for questions from 54 to 55.



54. Number of boys who are athlete and are disciplined ?  
 (A) 1 (B) 7 (C) 3 (D) 5
55. Number of girls who are not athlete ?  
 (A) 6 (B) 7 (C) 8 (D) 9
56. A man is facing South-West and then he turns  $135^\circ$  in the anticlockwise direction and then again he turns  $180^\circ$  clockwise. In which direction he is facing now ?  
 (A) West (B) East (C) South (D) North
57. A girls goes 40 meters North then turns right and walks 20 meters, then again she turns right and walks 20 meters again she turns right and walks 20 meters. How many meters she is from its original position?  
 (A) 10 m (B) 30 m (C) 20 m (D) zero meter
58. If '+' means ' $\div$ ', ' $\div$ ' means '-', '-' means ' $\times$ ' and ' $\times$ ' means '+' then  $15 + 3 \div 2 - 5 \times 12 = ?$   
 (A) - 43.5 (B) 18 (C) 11 (D) 7
59. If 'Q' means "add" to, 'K' means "multiply by", 'S' means "subtract from" and 'L' means "divide by" then,  $20 L 2 Q 3 K 7 S 8 = ?$   
 (A) 3 (B) 23 (C) 22 (D) 39
60. A father is now 2 times as old as his son. Five years back, he was 3 times as old as his son. The son's age is  
 (A) 5 (B) 10 (C) 15 (D) 20
61. Today is Rakesh's birthday. Two years from today he will be thrice as old as he was 10 years ago. How old is Rakesh today?  
 (A) 14 (B) 15 (C) 16 (D) 25

**Direction :** Find the missing number in each of the following question from **62** to **66** and choose the correct options.

62.



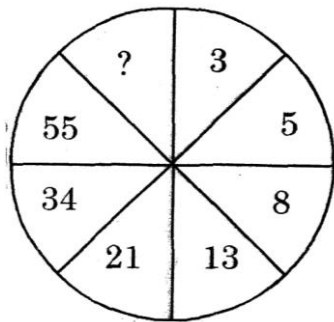
(A) 2400

(B) 3000

(C) 4200

(D) 3600

63.



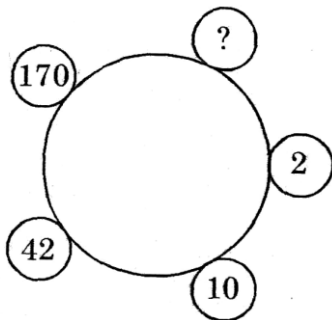
(A) 89

(B) 76

(C) 110

(D) 63

64.



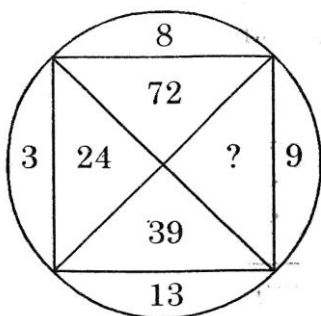
(A) 680

(B) 682

(C) 512

(D) 580

65.



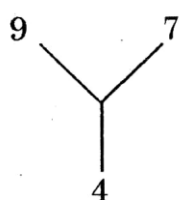
(A) 27

(B) 104

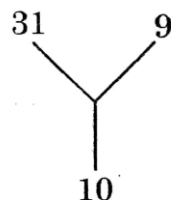
(C) 117

(D) 130

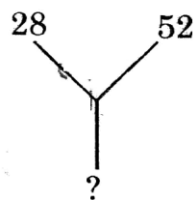
66.



(A) 25



(B) 20



(C) 15

(D) 10

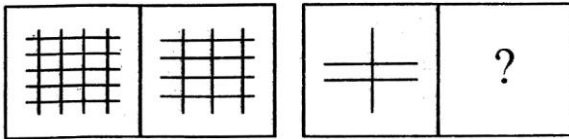
67. Calendar for 2016 will serve also for year  
(A) 2021 (B) 2020 (C) 2022 (D) 2023
68. Number of times the hands of clock are in a straight line in 24 hours is  
(A) 22 (B) 24 (C) 42 (D) 44
69. Find the number which when added to itself 15 times gives 144.  
(A) 7 (B) 8 (C) 9 (D) 10
70. A group of 420 persons consisting of coaches and players are there to participate in an event. For every 20 players there is a coach. Find the number of coaches in the group.  
(A) 20 (B) 19 (C) 18 (D) 17

**Direction:** From Question Nos. 71 to 75. Arrange the words given in each question in meaningful sequence and choose the correct options.

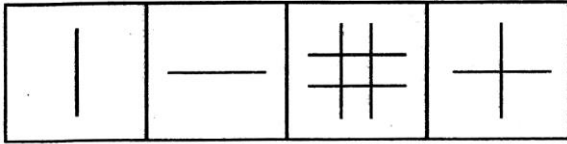
71. (1) Word (2) Paragraph (3) Sentence  
(4) Letters (5) Phrase  
(A) (4), (5), (2), (3), (1) (B) (4), (1), (5), (3), (2)  
(C) (4), (2), (5), (1), (3) (D) (4), (1), (5), (2), (3)
72. (1) Police (2) Punishment (3) Crime  
(4) Judge (5) Judgement  
(A) (1), (2), (3), (4), (5) (B) (3), (1), (2), (5), (4)  
(C) (3), (1), (4), (5), (2) (D) (1), (3), (5), (4), (2)
73. (1) Poverty (2) Population (3) Death  
(4) Unemployment (5) Disease  
(A) (2), (1), (4), (3), (5) (B) (1), (2), (4), (5), (3)  
(C) (2), (4), (5), (1), (3) (D) (2), (4), (1), (5), (3)
74. (1) Leaf (2) Fruit (3) Stem  
(4) Root (5) Flower  
(A) (4), (1), (3), (5), (2) (B) (4), (3), (1), (5), (2)  
(C) (4), (3), (5), (1), (2) (D) (3), (5), (1), (2), (4)
75. (1) Nation (2) Village (3) City  
(4) District (5) State  
(A) (2), (3), (4), (5), (1) (B) (2), (3), (5), (4), (1)  
(C) (3), (2), (5), (4), (1) (D) (5), (4), (3), (1), (2)

**Direction :** From question Nos. 76 to 80, study and analysis the figures and identify the rule which they follow. Choose the correct option for ? place.

76.

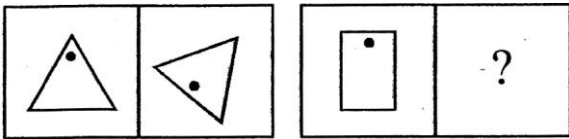


**Answer figures**

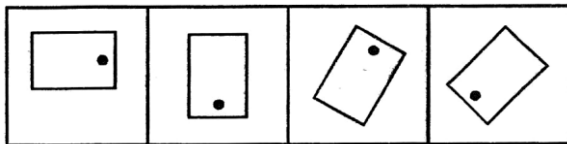


(A) (B) (C) (D)

77.

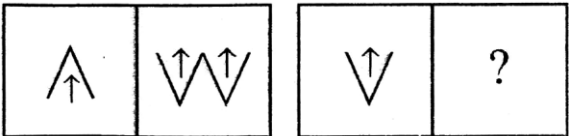


**Answer figures**



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

78.

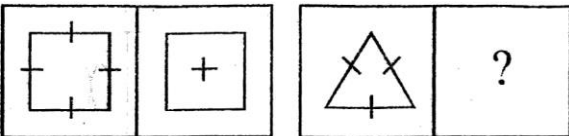


**Answer figures**

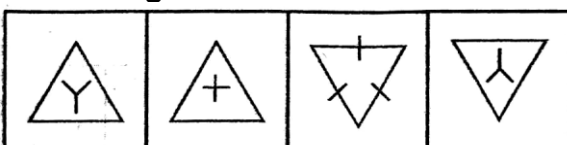


(A) (B) (C) (D)

79.



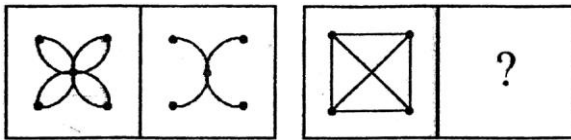
**Answer figures**



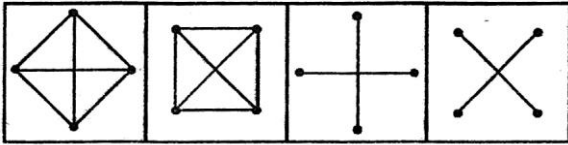
(A) (B) (C) (D)



80.



Answer figures



(A)

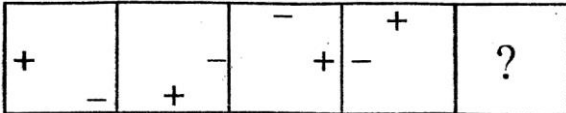
(B)

(C)

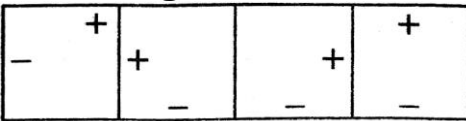
(D)

81.

Problem Figures



Answer figures



(A)

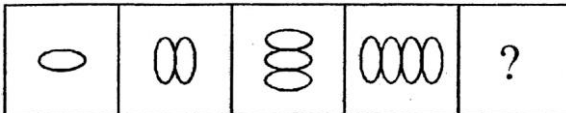
(B)

(C)

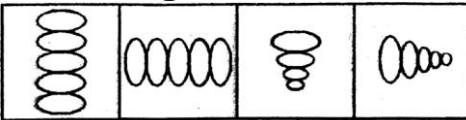
(D)

82.

Problem Figures



Answer figures



(A)

(B)

(C)

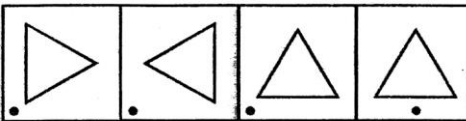
(D)

83.

Problem Figures



Answer figures



(A)

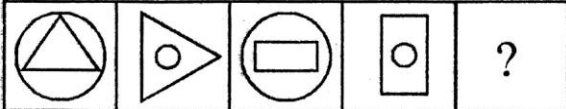
(B)

(C)

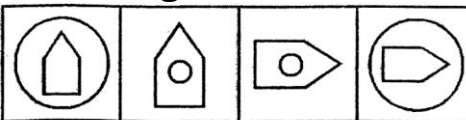
(D)

84.

Problem Figures



Answer figures



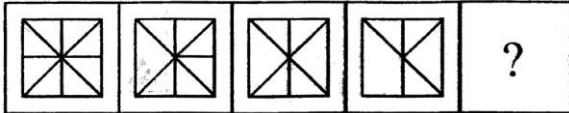
(A)

(B)

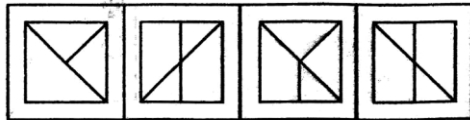
(C)

(D)

## 85. Problem Figures

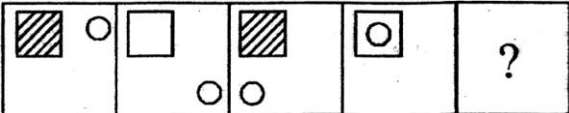


## Answer figures

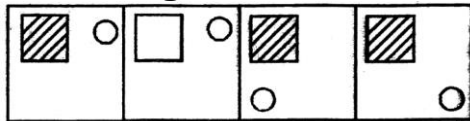


(A) (B) (C) (D)

## 86. Problem Figures

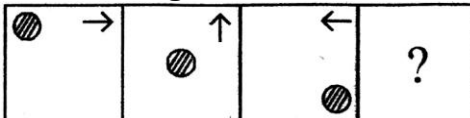


## Answer figures

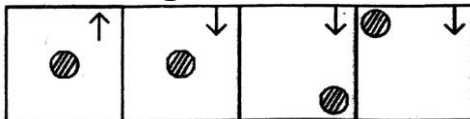


(A) (B) (C) (D)

## 87. Problem Figures

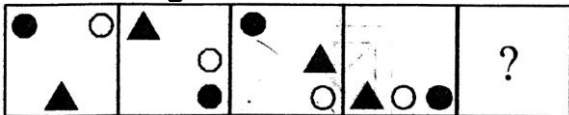


## Answer figures

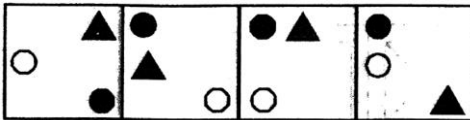


(A) (B) (C) (D)

## 88. Problem Figures

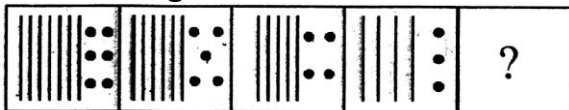


## Answer figures

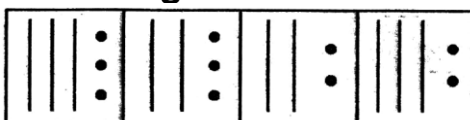


(A) (B) (C) (D)

## 89. Problem Figures

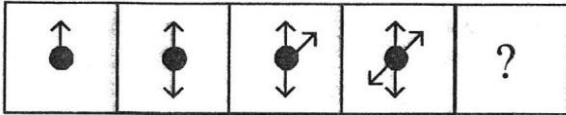


## Answer figures

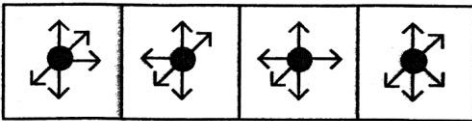


(A) (B) (C) (D)

## 90. Problem Figures



## Answer figures



(A)

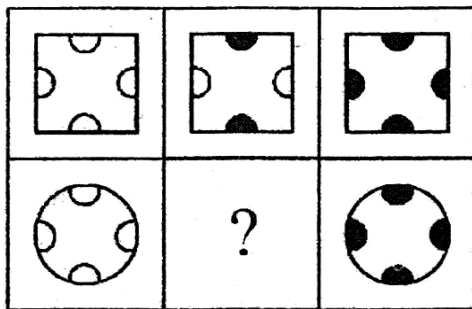
(B)

(C)

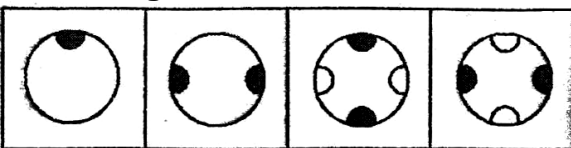
(D)

**Direction :** From question Nos. 91 to 95, complete the figures by choosing appropriate figure from **answer figures**.

91.



## Answer figures



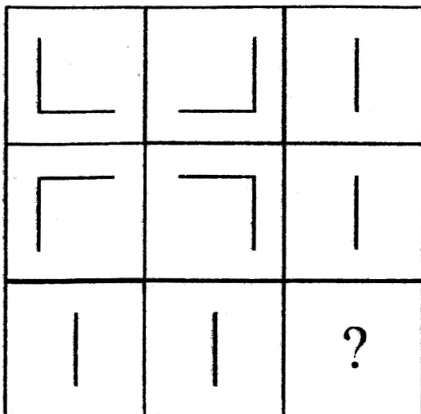
(A)

(B)

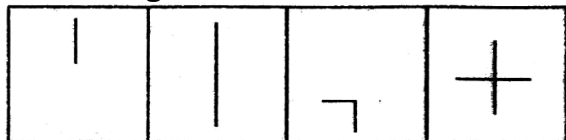
(C)

(D)

92.



## Answer figures



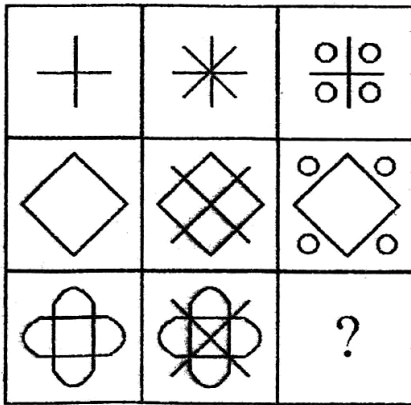
(A)

(B)

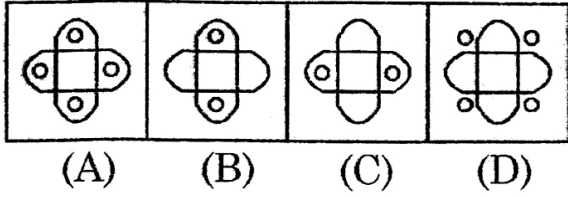
(C)

(D)

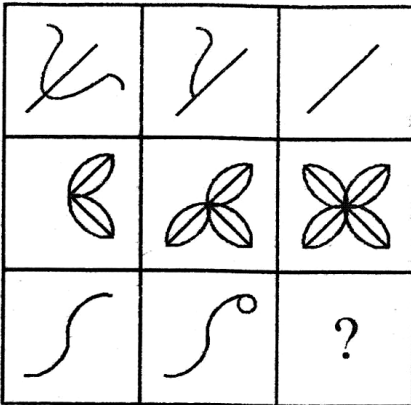
93.



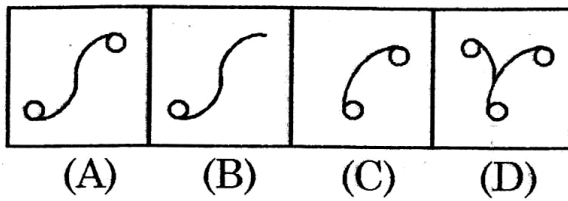
Answer figures



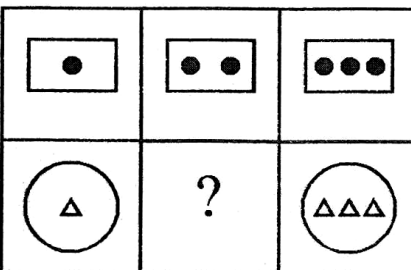
94.



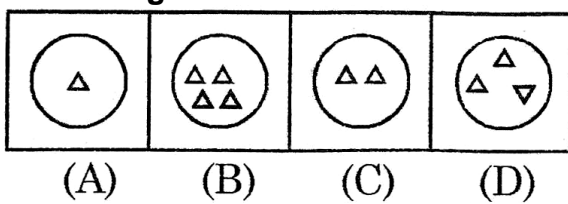
Answer figures



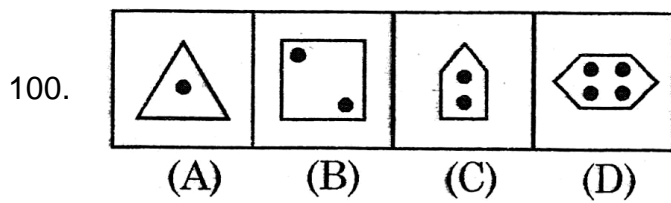
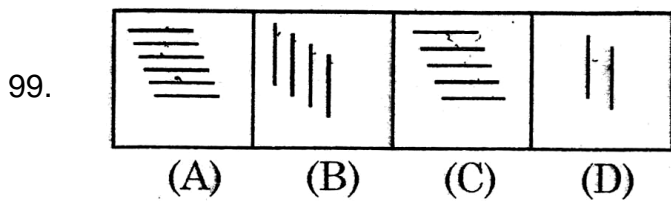
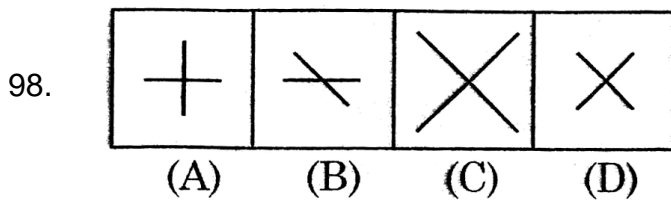
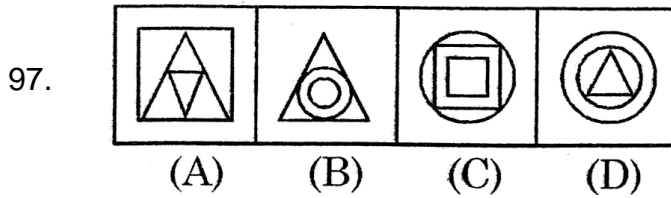
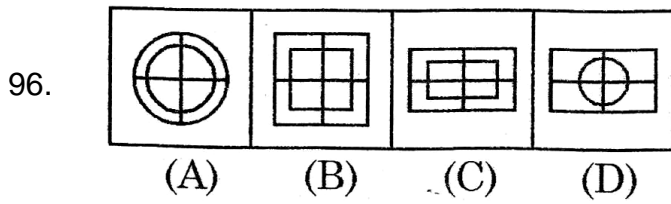
95.



Answer figures



**Direction :** Choose the odd figure out from the figures in Question number **96** to **100**.



★★★★★