SAMPLE PAPER-01

MENTAL ABILITY TEST

1. If in a certain code ADMIRE is written as AIDRME, then how would ADORES be written in the same code ?

(1) AODRSE   (2) ARDESO

(3) ARDEOS   (4) AREDOS

2. Which group of letters is different from others ?

(1) DCBFE   (2) JKIHL

(3) TSRQU   (4) UWXZY

3. If in a certain code 'facing problems with health' is coded as 'mlp hlt ngi snk' 'rise with every challenge' is coded as 'snk rtv lne riy', 'facing challenge each day' is coded as 'ngi riy nop hus', 'health problems on rise' is coded as 'hlt sa rtv mlp' then whose code can be 'riy snk mlp'

(1) problems every day   (2) with health day

(3) facing every challenge (4) challenge with health

4. A series of small letters is given which follow a certain pattern.

However some letters are missing from the series. You have to find out the right set of letters from alternatives that can be inserted into the blanks of the series.
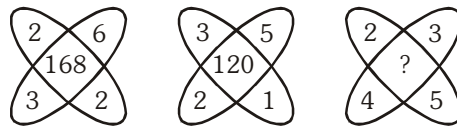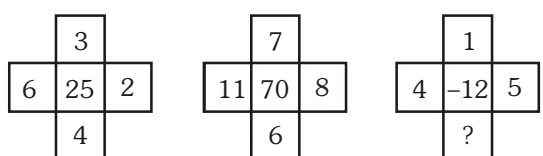
_a_b_abaa_bab_abb

(1) aaabb   (2) ababb

(3) babab   (4) babba

Directions (Q.5 & Q.6) : The numbers have been arranged under some rule. Based on that rule, which number will come in place of the question mark?

5. 445, 221, 109, 53, 25, 11, ?

(1) 2   (2) 4   (3) 6   (4) 8

6. 6, 15, 35, 77, 143, ?

(1) 171   (2) 181   (3) 191   (4) 221

Directions (Q.7 to Q.9) : In each of the following figures, numbers are written according to some patterns and one number is missing, shown by question mark. Find the missing number that replaces the question mark.

7.

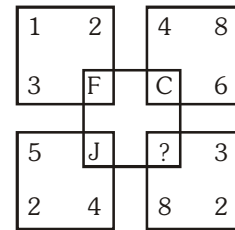| 2	6
168	
3	2

3	5
120	
2	1

2	3
?	
4	5

(1) 84   (2) 195   (3) 240   (4) 275

8.

	3	
6	25	2
	4	

	7	
11	70	8
	6	

	1	
4	–12	5
	?	

(1) 1   (2) 2   (3) 6   (4) 10

9.

28	20	7
84	35	12
45	?	9

(1) 15   (2) 18   (3) 20   (4) 25

10. Find the letter to be placed in place of '?' in the figure given.

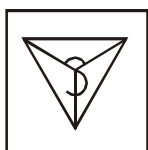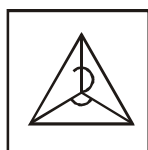| 1	2	4	8
3	F	C	6
5	J	?	3
2	4	8	2

(1) M   (2) L   (3) N   (4) R

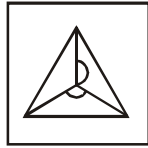**11.** How many triangles are in the given figure ?
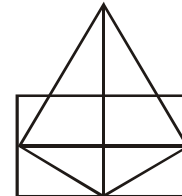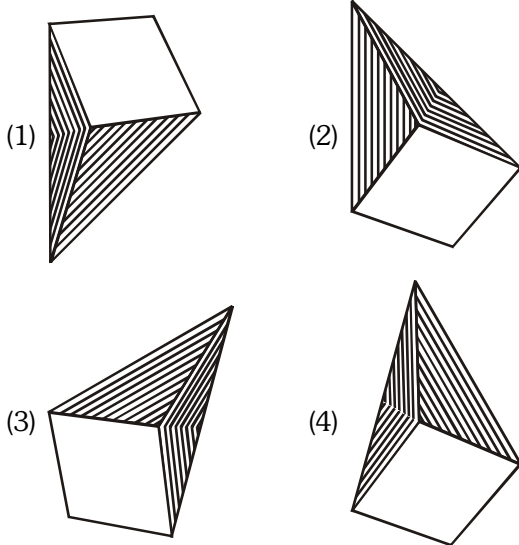

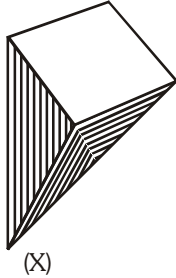(1) 11   (2) 13   (3) 15   (4) 17

12. Choose the correct mirror image of the figure (X) from four alternatives given along with it. The mirror has been represented by a line MN.
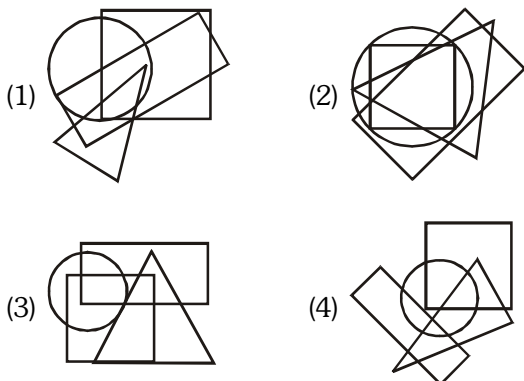

(X)
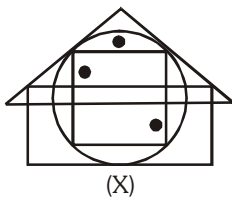
(1)   (2)

(3)   (4)

13. A clock seen through a mirror shows quarter past three. What is the correct time ?

(1) 9:45   (2) 9:15   (3) 8:45   (4) 3:15

14. Choose the correct water image of the figure (X) from the four alternatives given along with it.

(X)

(1)   (2)

(3)   (4)

15. Among all the alternatives marked (1), (2), (3) and (4), select the one which satisfies the same condition of placement of the dot (s) as in Fig (X).

(X)

(1)   (2)

(3)   (4)

16. Choose the alternative which will be formed after folding the fig (X) into a cube.


(X)

A   B   C   D
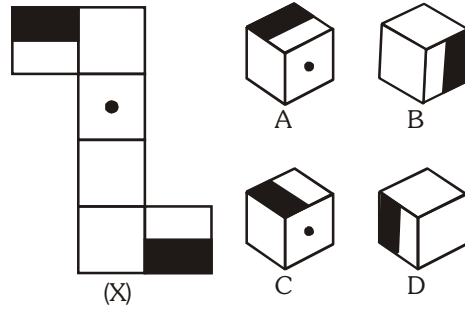
(1) A & B only   (2) B & C only
(3) B & D only   (4) A, B, C and D

17. Four positions of a dice are shown opposite to which face number 6 will appear?

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

18. Two positions of a dice are shown. Which number will appear on the face opposite the one having 3 ?


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

Directions (Q. 19 & Q.20) : In each question two or three statements followed by two conclusions numbered I and II are given. Decide which of the given conclusions logically follows the given statements disregarding commonly known facts. Give answer:

(1) If only conclusion I follows
(2) If only conclusion II follows
(3) If both I and II follows
(4) If neither I nor II follows

19. **Statements :**

Some pencils are blankets.
All blankets are erasers.

Conclusion :

I. No eraser is a pencil
II. All blankets to be pencils is a possibility.

20. **Statements:**

All stars are bottles
Some bottles are papers
No paper is a calendar

Conclusion:

I. All stars to be papers is a possibility
II. No Calendar is a bottle.

21. Which one of the following diagram best indicate the relationship among Tennis fans, Cricket Players and students ?
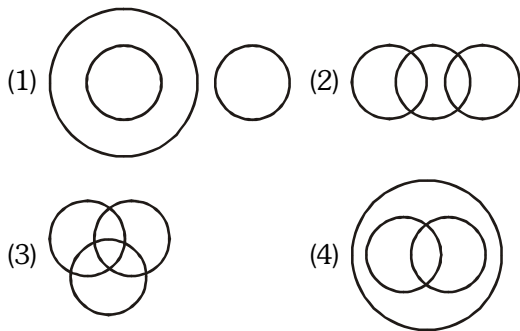
Directions (Q.22 & Q.23) : The questions are based on the following diagrams. Study the diagrams carefully and answer the questions.
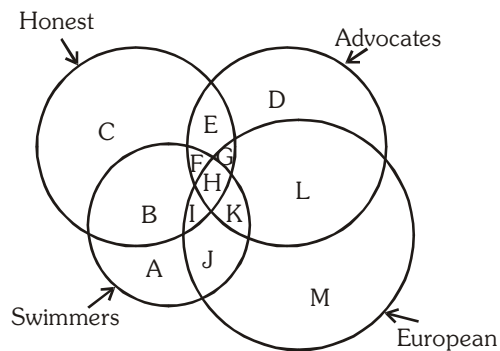
22. What is true for F ?
(1) All Honest European swimmers.
(2) All Honest Advocates who are swimmers also.
(3) All Non-European Advocates who are honest swimmers.
(4) All Non-European who are honest swimmers.

23. The advocates from Europe who are dishonest swimmers is denoted by ?
(1) J   (2) K   (3) L   (4) H

Directions (Q.24 & Q.25) : Radha is wife of Mohan. She has three sons respectively as older - Suresh, Rakesh and Satish. Bimla is only daughter of Radha. She is youngest.

Name of their wives are Sudha, Savita and Sita respectively. Mr Raghunath is husband of Bimla. Suresh has two daughters as Kamla and Sarla. He has a son Deepak. Rakesh has three sons namely as Sohan, Ramu and Kewal. Satish has one son (Shrikant) one daughter (Shobha). Bimla has also one son (Sagar) and one daughter (Sarika).

24. Bimla is related to Kamla as
(1) Sister   (2) Aunt
(3) Niece   (4) Grand Mother

25. How many members are there in the family?
(1) 16   (2) 18   (3) 19   (4) 20

26. B, the son of A was married to C, whose sister D was married to E, the brother of B. How D is related to A?
(1) Sister   (2) Daughter-in-law
(3) Sister-in-law   (4) Cousin

27. Ram walks 20 metres in front in east and 15 metres to the right. Then every time turning to his left, he walks 5, 30 and 25 metres respectively. How far is he from his starting point and in which direction?
(1) 5 metres, South   (2) 10 metres, North
(3) 15 metres, North   (4) 20 metres, East

28. (a) $P \times Q$ means Q is mother of P;
(b) $P + Q$ means P is father of Q;
(c) $P - Q$ means P is brother of Q;
(d) $P \div Q$ means Q is sister of P.
Which of the following means 'M is niece of T'?
(1) $M \div D + T \times R$
(2) $T - D + R \div M$
(3) $T \times D + R \div M$
(4) $D \div M + R - T$

29. Six sides of a cube are coloured in the following manner.
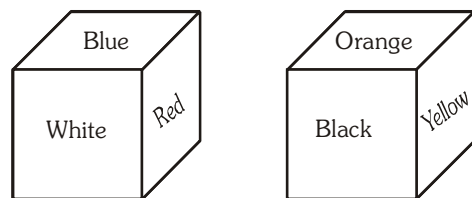
If Blue and Orange are opposite and Red is on the top, which colour will be at the bottom?
(1) Black   (2) White
(3) Orange   (4) Yellow

30. Eight students A, B, C, D, E, F, G and H are going to college in two cars and following are conditions -
There are four students in each car.
A is in the same car in which D is sitting but H is not in the same car.
B and C are not in the car in which D is sitting.
F is sitting with A and E.
Four students sitting in the same car are:
(1) A, B, G, H   (2) B, D, F, G
(3) B, C, G, H   (4) A, C, D, E

31. There are four friends A, B, C and D. One of them is a student of Biology and plays football and basket ball. A and B study chemistry. A plays table tennis. Both the chemistry student play volleyball. D is the student of physics. One chemistry student also plays cricket. The Physics students plays volleyball and carom. All the friends play two games and study one subject each.

who does not play volleyball?

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

32. 27 small cubes are placed in such a way that a big cube is formed ?
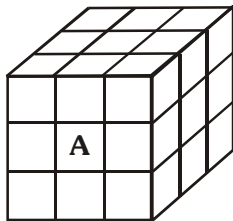
How many cubes are touching cube marked A?

(1) 5   (2) 8   (3) 9   (4) 17

33. A ranks fifth in a class. B is eight from the last. If C is sixth after A and just in the middle of A and B. How many students are there in the class?

(1) 23   (2) 24   (3) 25   (4) 26

Directions (Q.34 to Q.35) : Six persons A, B, C, D, E and F are sitting forming a circle and facing towards centre. B is between A and C, E is between F and D. F is sitting straight opposite to A and right to E.

34. D is between which of the following pair ?

(1) EF   (2) AE   (3) AB   (4) CF

35. If the positions of B and E are interchanged and also that of C & D then D will be in between which of the following pair ?

(1) CB   (2) ED   (3) FD   (4) FE

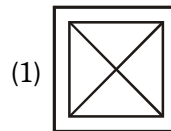**36.** How many quadrilaterals are there in the given figure ?
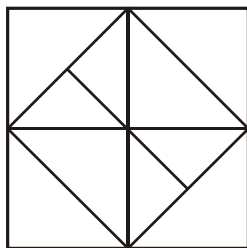
(1) 20   (2) 22   (3) 24   (4) 26

37. Which one of the answer figure would occupy the next position in the problem figure. If they continue in the same order.
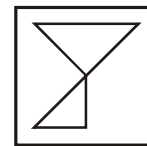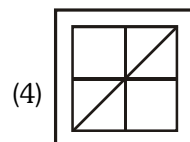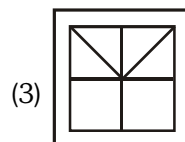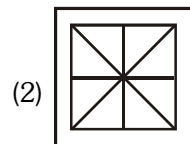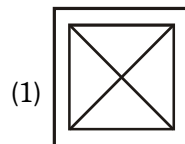
Problem figure
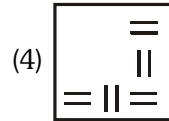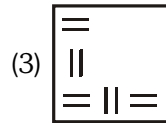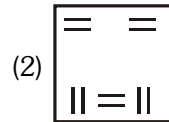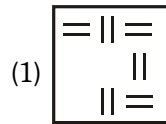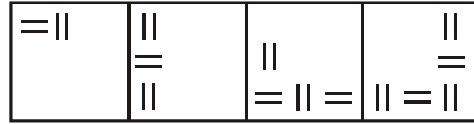
38. Four figures have been given, of which three are alike in some way and one is different. Choose the odd one.
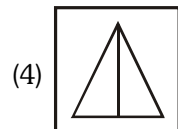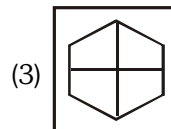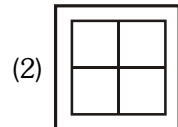
39. Figure (X) is embedded in one of the given four figures. Trace out the correct alternatives.
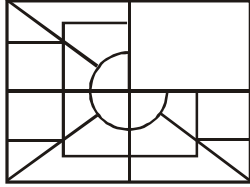

(X)

40. One segment of the given design/pattern is missing. Select the alternative which will complete the design when placed on the missing area.
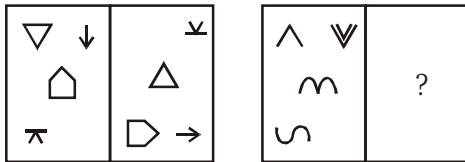
Incomplete figure

(1)   (2)

(3)   (4)

41. The first unit contains two figures and the second unit contains one figure and a question mark. Find out which one of the answer figures should be placed at question mark.
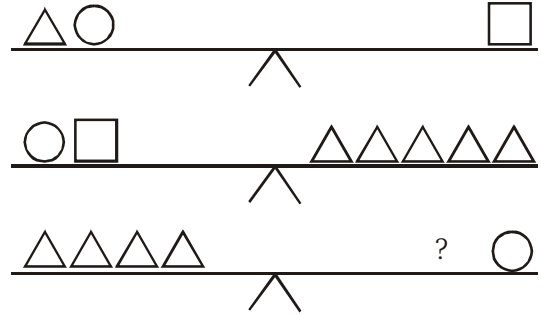
Problem figure

(1)   (2)

(3)   (4)

42. Find the missing number in the series.
1, 2, 2, 4, 16, ? , 65536
(1) 276   (2) 256   (3) 198   (4) 64

43. If 1 + 2 = 5
5 + 6 = 61
Then 3 + 4 = ?
(1) 15   (2) 25   (3) 31   (4) 34

44. Figure below represent a balance which symbol replaces (?)

(1)   (2)

(3)   (4)

45. An application was received by the office clerk in the afternoon of a weekday. Next day he forwarded it to the table of senior clerk who was on leave that day. The senior clerk next day evening put up the application to the officer concerned. The officer studied the application and signed on the same day i.e. Friday which day the application was received by the officer clerk ?
(1) Tuesday   (2) Wednesday
(3) Monday   (4) Thursday

46. A monkey climbs 10 metres at the beginning of each hour and rest for a while when he slips back 5 metres before he again starts climbing in the beginning of next hour. If he starts climbing at 8 am, at what time will he first touch the flag at 50 metres from the ground ?
(1) 4 pm   (2) 5 pm   (3) 6 pm   (4) 7 pm

47. If $A \times B$ means A and B are of the same age.
  A + B means A is younger than B.
  A – B means B is younger than A.
Then Sham $\times$ Mohan – Reeta + Arif means:
(1) Reeta is the oldest
(2) Reeta is the youngest
(3) Arif is the youngest
(4) Arif is younger than Sham

48. If the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 are substituted by a, b, c, d, e, f, g, h, i, j respectively so that 135 is written as ace then $(ef \times f - ba) \div ed$ is equal to:
(1) 2   (2) 3   (3) 4   (4) 5

49. P, Q, R, S are four statements such that
If P is true, then Q is true
If Q is true, then R is true
If S is true then at least one of Q and R is false.
Then which of the following is correct?
(1) If P is true then S is false
(2) If S is false both Q and R are true
(3) If atleast one of Q and r is false then S is false
(4) If Q is true then S is true.

50. Consider a 99 digit number created by writing side by side the first fifty four natural numbers as follows
1 2 3 4 5 6 7 8 9 10 11 12 13 ......53 54
The above number when divided by 8 will leave a remainder of
(1) 6   (2) 4   (3) 2   (4) 0

Directions(Q.51 to Q.53): Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

51. A, CD, GHI, ?, UVWXY
(1) KLMN   (2) LMNO
(3) MNOP   (4) NOPQ

52. ADVENTURE, DVENTURE, DVENTUR, ?, VENTU
(1) VENTUR   (2) VENTURE
(3) DVENT   (4) DVENTU

53. UPI, ?, ODP, MBQ, IAW
(1) SIJ   (2) SHJ   (3) RHJ   (4) TIJ

54. Which of the following diagrams indicates the relation between Judge, Thieves and Criminals ?
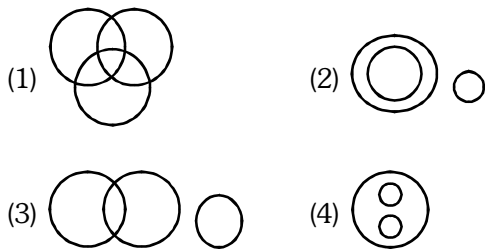
55. Which of the following diagrams indicates the relation between Iron, Lead and Nitrogen?
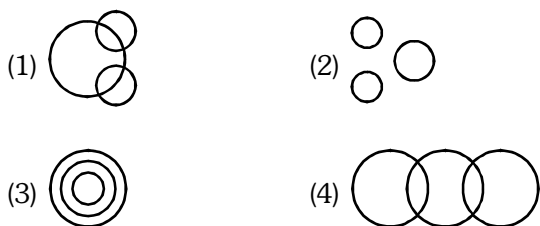
56. Which of the following diagrams indicates the relation between Bulb, Lamp and Light ?
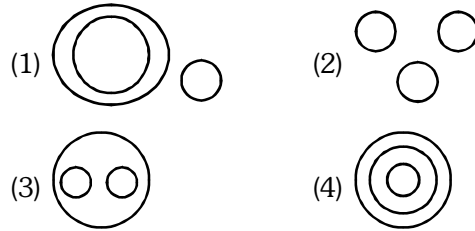
57. In the following figure, triangle represents 'girls', square, 'players' and circle, 'coach'. Which part of the diagram represents the girls who are players but not coach ?
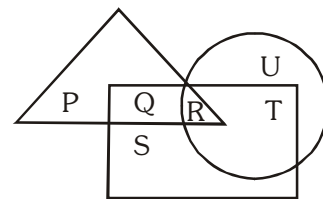
(1) P   (2) Q   (3) R   (4) S

58. The diagram given below represents those students who play Cricket, Football and Kabaddi. Study the diagram and identify the students who play all three games.
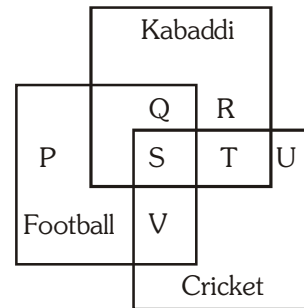
(1) P + Q + R   (2) V + T
(3) S + T + V   (4) S

Directions(Q.59 to Q.62): P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:

1. P is second to the right of T who is the neighbour of R and V.
2. S is not the neighbour of P.
3. V is the neighbour of U.
4. Q is not between S and W, and W is not between U and S.

Answer the questions from the above sitting arrangement.

59. Who two of the following are not neighbours ?
(1) RV   (2) UV   (3) RP   (4) QW

60. Who is immediate right to the V ?

(1) P (2) U (3) R (4) T

61. Which of the following is correct ?

(1) P is to the immediate right of Q

(2) R is between U and V

(3) Q is to the immediate left of W

(4) U is netween W and S

62. What is the position of S ?

(1) Between U and V

(2) Second to the right of P

(3) To the immediate right of W

(4) Data inadequate

Directions (Q.63 to Q.66): Five girls are sitting on a bench to be photographed Seema is to the left of Rani and to the right of Bindu, Mary is to the right of Rani. Reeta is between Rani and Mary. Answer the questions from the above sitting arrangement.

63. Who is sitting immediate right to Reeta ?

(1) Bindu (2) Rani

(3) Mary (4) Seema

64. Who is in the middle of the photograph ?

(1) Bindu (2) Rani

(3) Reeta (4) Seema

65. Who is second from the right in the photograph ?

(1) Mary (2) Rani

(3) Reeta (4) Bindu

66. Who is second from the left in photograph ?

(1) Reeta (2) Mary

(3) Bindu (4) Seema

Directions (Q.67 to Q.69) : Choose the word which is different from the rest.

67. (1) Producer (2) Director

(3) Investor (4) Financer

68. (1) Calendar (2) Year

(3) Day (4) Month

69. (1) Mumbai (2) Cochin

(3) Kandla (4) Mysore

70. If A + B means A is the father of B; A–B means A is the brother B; A % B means A is the wife of B and A ×B means A is the mother of B, which of the following shows that M is the maternal grandmother of T ?

(1) M × N % S + T (2) M × N – S % T

(3) M × S – N % T (4) M × N × S % T

71. 1. B5D means B is the father of D.

2. B9D means B is the sister of D.

3. B4D means B is the brother of D.

4. B3D means B is the wife of D.

Which of the following means F is the mother of K?

(1) F3M5K (2) F5M3K

(3) F9M4N3K (4) F3M5N3K

72. If POND is coded RSTL how is HEAR written in the code ?

(1) GHIJ (2) JIGZ

(3) GHIZ (4) None of these

73. If SPIDER is coded as PSDIRE, how is COMMON written in that code ?

(1) OCMMNO (2) OCMMOO

(3) OCMOON (4) OCMOMN

Directions(Q.74 to Q.76): All the six members of a family A, B, C, D, E & F are staying together. B is the son of C but C is not the mother of B. A & C are married couple. E is the brother of C. D is the daughter of A. F is the brother of B.

74. How many male members are there in the family ?

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

75. Who is the mother of B ?

(1) D (2) F (3) A (4) E

76. How many children does A have ?

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

77. Which digit will appear on the face opposite to the face with number 3 ?
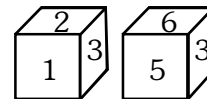
(1) 4 (2) 5 (3) 6 (4) 2

78. Which number is on the face opposite to 6 ?
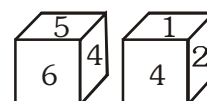
(1) 4 (2) 1 (3) 2 (4) 3

79. Which sign will be opposite to '+' ?
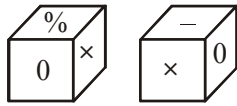
(1) % (2) – (3) × (4) $

**Directions(Q.80 to Q.87):** Find out the alternative which will replace the question mark.

80. AZBY : CXDW :: EVFU : ?

 (1) GTHS (2) GHTS (3) GSTH (4) TGSH

81. ZRYQ : KCJB :: PWOV : ?

 (1) GBHA (2) ISJT (3) ELDK (4) EOFP

82. Computer : fqprxvht :: Language : ?

 (1) oxpixdig   (2) ocqicyig

 (3) ocqixcjg   (4) ocqixcig

83. ACEG : ? :: BDFH : KMOQ

 (1) NLPR   (2) LMNO

 (3) JLNP   (4) JNLO

84. M × N : 13 × 14 :: F × R : ?

 (1) 14 × 15   (2) 5 × 17

 (3) 6 × 18   (4) 7 × 19

85. Conference : Chairman :: Newspaper: ?

 (1) Reporter   (2) Distributor

 (3) Printer   (4) Editor

86. Problem figures
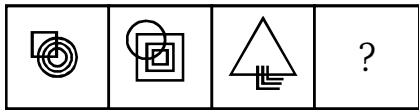
87. Problem Figures
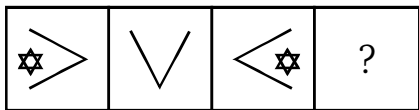
88. Find the number of tirangle in the figure below. Problem figure
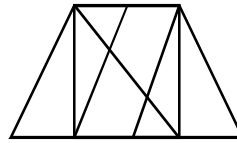
(1) 8 (2) 10 (3) 12 (4) 14

89. Find the minimum number of straight lines required to make the given figure.
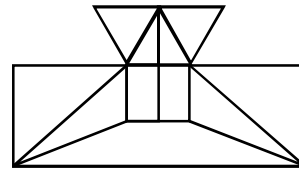
(1) 16 (2) 17 (3) 18 (4) 19

90. Count the number of squares in the given figure.
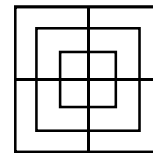
(1) 8 (2) 12 (3) 15 (4) 18

Direction (Q.91 & Q.92) : Find out the alternative figure which contains figure (x) as its part.

91.
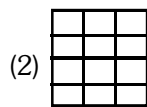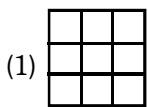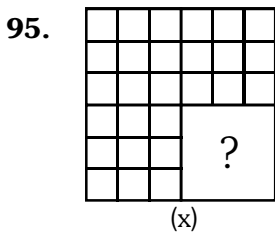

(x)

92.

(x)

ALLEN
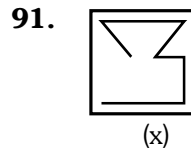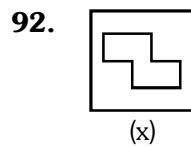
Directions(Q.93 & Q.94): Find out which of the figures (1), (2), (3) and (4) can be formed from the pieces given in figure (x).

93.

(x)

(1)　　　　(2)

(3)　　　　(4)

94.

(x)

(1)　　　　(2)

(3)　　　　(4)
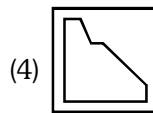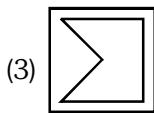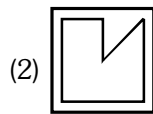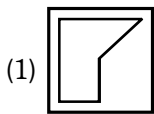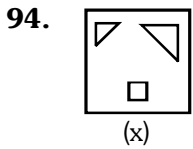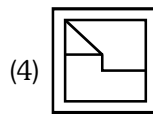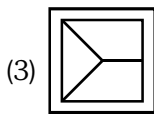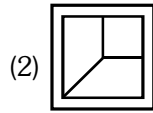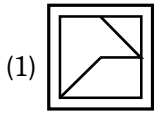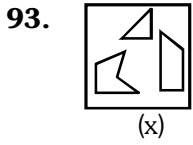
Directions(Q.95 to Q.98): Identify the figure that completes the pattern (x).

95.

(x)

(1)　　　　(2)

(3)　　　　(4)

96.

(x)

(1)　　　　(2)

(3)　　　　(4)

97.

(x)

(1)　　　　(2)

(3)　　　　(4)

98.

(x)

(1)　　　　(2)

(3)　　　　(4)
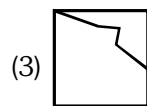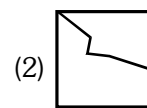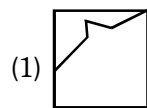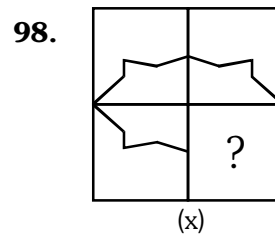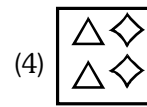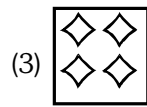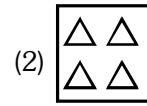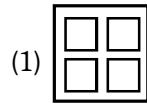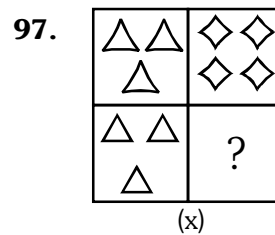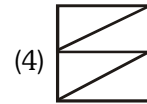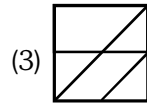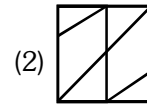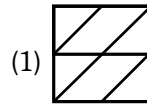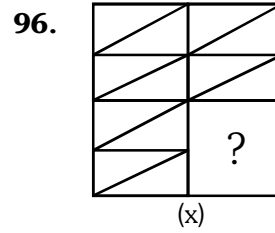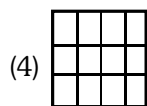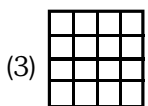
Directions(Q.99 & Q.100): In these series, there are both letter pattern and number pattern. Fill the blank in series.

99. ZA_5, Y_4B, XC_6, W_3D, ?

(1) E_7V　　(2) V_2E　　(3) VE_5　　(4) VE_7

100. DEF, DEF_2, DE_2F_2, DE_2F_2, ?, $D_2E_2F_3$

(1) DEF_3　　(2) D_3EF_3　　(3) D_2E_3F　　(4) $D_2E_2F_2$

SPACE FOR ROUGH WORK