CET MAHARASTRA – 2007

Directions: Choose the best alternative.

1. Four the following five are alike in a certain why and so form a group, which is the one that does not belong to the group?

    (1) Door   (2) Wall   (3) Window   (4) Roof   (5) Concrete

2. Locker is related to 'Jewellery' in the same way as 'Godown' is related to-

    (1) Storage   (2) Grasim   (3) Garments   (4) Goods   (5) Eatables

3. In a certain Code DESK is written as # $ 52. RIDE is written as %7#$. How is Risk written in that code?

    (1) % 725   (2) % 752   (3) %7#2   (4) %7$#   (5) None of these

4. How many such pairs of letters are there in the word INSTRUCTION which have as many letters between them in the word as in the English alphabet?

    (1) One   (2) Two   (3) Three   (4) Four   (5) None of these

5. In a certain code language FIGHTING is written as BMCRQMPC. How will FITTING be written in this code language?

    (1) BMQQMPC   (2) BMQQPMC   (3) BMMQQPC   (4) MBQMQPC   (5) BMNQRC

6. In a certain code language 15729 is written as AEGBI & 2346 is written as BCDF, then how will 23549 be written in that language?

    (1) BCEDI   (2) CEBDI   (3) CBEDI   (4) ABEDI   (5) None of these

7. "BEGK" is related to "ADFJ" in the same way as the "PSVY" is related to :

    (1) ORUX   (2) ROUX   (3) LQUT   (4) LOQT   (5) None of these

Q.8 – 10: In question 8 and 10 select the alternative which completes the series

8. WFB, TGD, QHG: ?

    (1) NJK   (2) NIJ   (3) OIK   (4) NIK   (5) PJK

9. BMX, DNW, FOU: ?

    (1) HPS   (2) GPS   (3) HPT   (4) HQS   (5) GHO

10. KORT, PJWO :: FINR: ?

    (1) JCRN   (2) JSMR   (3) KDSM   (4) KCSM   (5) JRMR

11 – 15: In each of the following questions select the one which is different from other three?

11. (1) 65   (2) 90   (3) 94   (4) 85   (5) 56

12. (1) GJM   (2) EIL   (3) VXB   (4) PSV   (5) MSP

13. (1) The Hindustan   (2) The Telegraph   (3) Outlook   (4) Indian Express   (5) India Today

14. (1) MARS   (2) SUN   (3) Saturn   (4) Mercury   (5) Pluto

15. (1) EIK   (2) NRT   (3) RVX   (4) KOQ   (5) KLO

Questions 16 – 25: Study the graph to answer the given questions.

	Company A	Company B
Income in 1999	Rs. 10 crores	Rs. 20 crores
Expenditure in 1999	Rs. 5 crores	Rs. 10 crores

Profit = I – E; % profit = $\dfrac{\text{Profit}}{\text{E}} \times 100$
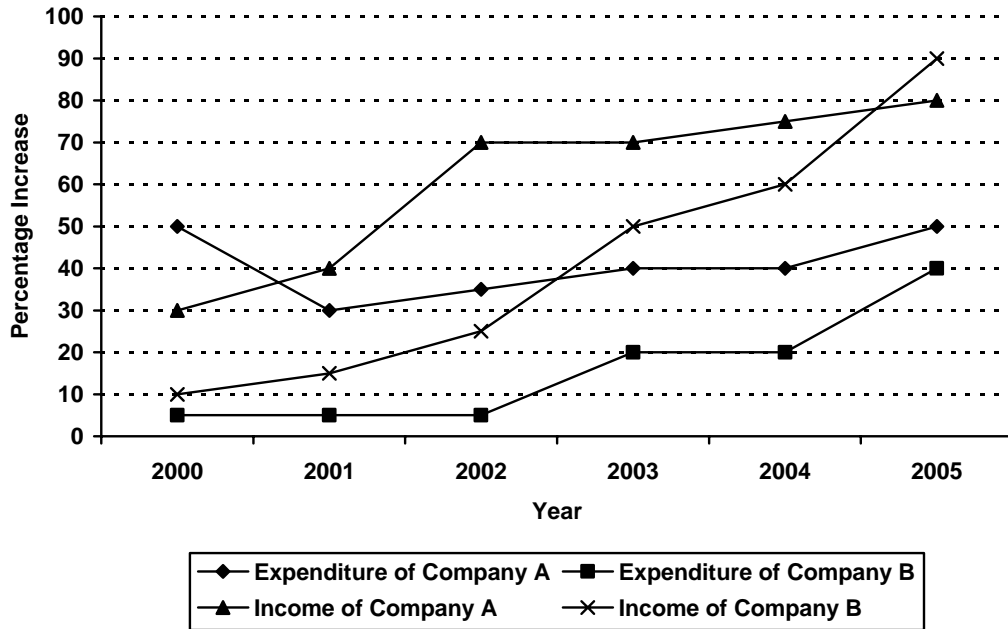
16. How much was the income of Company B in 2000?

    (1) Rs. 21 crores   (2) Rs. 25 crores   (3) Rs. 26 crores

    (4) Cannot be determined   (5) None of these

17. How much was the Expenditure of Company A in 1998?

    (1) Rs. 2.5 crores   (2) Rs. 1.5 crores   (3) Rs. 3 crores

    (4) Cannot be determined   (5) None of these

18. Which year was the income of Company A **around** Rs. 90 crores?

    (1) 2004   (2) 2005   (3) 2003   (4) Cannot be determined (5) None of these

19. How much is the percent profit of Company A in 2000?

    (1) $73\dfrac{1}{3}$ (2) 57.7   (3) $42\dfrac{3}{10}$ (4) Cannot be determined (5) None of these

20. How much is the profit of Company B in 2001?

    (1) Rs. 14,27,50,000/-   (2) Rs. 11,50,00,000/-   (3) Rs. 8,45,00,000/-

    (4) Cannot be determined   (5) None of these

21. How much is the Income of Company A in 2002?

    (1) Rs. 18,20,00,000/-   (2) Rs. 31,62,50,000/-   (3) 30,94,00,000/-

    (4) Cannot be determined   (5) None of these

22. Which year was the Income of Company B **around** Rs.76 crores?

    (1) 2003   (2) 2004   (3) 2005   (4) 2002 & 2003   (5) None of these

23. The Income of Company A in 2001 is what percent of that of 1999?

(1) $233\frac{1}{3}$ (2) $126\frac{1}{2}$ (3)182   (4) 150   (5) None of these

24. For Company B, what is the broad and **approximate** percent profit in 2003?

(1) 175   (2) 180   (3) 320   (4) 130   (5) 240

25. Which of the following is **NOT** true?

(1) The expenditure of both the companies increased every year.

(2) In 2005, the profit of Company B was more than that of Company A.

(3) The percent profit of Company B was more than that of Company A in each year from 2000 onwards.

(4) In 2002, the expenditure of Company B was less than that of Company A

(5) The expenditure of Company B was not the same for any of the two given years.

Q.26 – 30: Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

(A) Do the devices that make it possible to do so many things at once truly raise our productivity or merely help us spin our wheels faster?

(B) More important, they're exploring what can be done about it – how we can work smarter, live smarter and put our beloved gadgets back in their proper place, with us running them, not the other way around.

(C) The dinging digital devices that allow us to connect and communicate so readily also disrupt our work, our thoughts and what little is left of our private lives.

(D) They have begun to calculate the pluses, the minuses and the economic costs of the interrupted life – in dollars, productivity and dysfunction.

(E) What sort of toll is all this disruption and metnal channel switching taking on our ability to think clearly, work effectively and function as healthy human beings?

(F) Over the past five years, psychologists, efficiency experts and information-technology researchers have begun to explore those questions in detail.

26. Which of the following should be the **FIRST** sentence?

(1) A   (2) B   (3) C   (4) D   (5) E

27. Which of the following should be the **SECOND** sentence?

(1) A   (2) B   (3) C   (4) D   (5) E

28 Which of the following should be the **THIRD** sentence?

(1) A   (2) B   (3) C   (4) D   (5) E

29 Which of the following should be the **FIFTH** sentence?

(1) A   (2) B   (3) C   (4) D   (5) E

30 Which of the following should be the **SIXTH (LAST)** sentence?

(1) A   (2) B   (3) C   (4) D   (5) E

Q.31 – 35: Which of the phrases (1), (2), (3) and (4) given below should replace the phrase given in **bold** in the following sentence to make the sentence grammatically meaningful and correct. If the sentence is correct as it is and no correction is required, mark (5) as the answer.

31.   In any serious investigation, all points of suspicions **should check properly.**
       (1) must check properly   (2) should be checked properly   (3) should properly check
       (4) must properly check   (5) No correction required

32.   The circumstances in which he **succumbed below pressure,** are not known.
       (1) succumbed below force   (2) was succumbed below pressure
       (3) was succumbing below force   (4) succumbed to pressure
       (5) No correction required

33.   All human beings **are vulnerable to** greed and temptations.
       (1) are vulnerable for   (2) have vulnerability of   (3) were vulnerable at
       (4) have been vulnerable with   (5) No correction required

34   **How did the burglar got** into the bank is a mystery.
       How did the burglar get   (2) What did the burglar get   (3) How the burglar got
       (4) Why did the burglar get   (5) No correction required

35   What most of the people think right cannot be **said to be necessary and** right?
       (1) said to be necessarily   (2) said to be necessarily and
       (3) necessarily said to be   (4) said necessary and to be
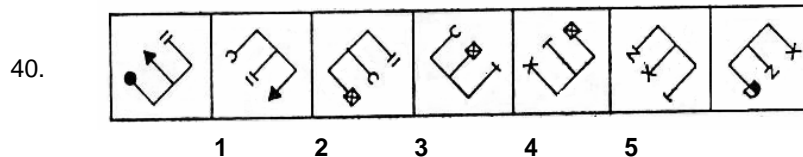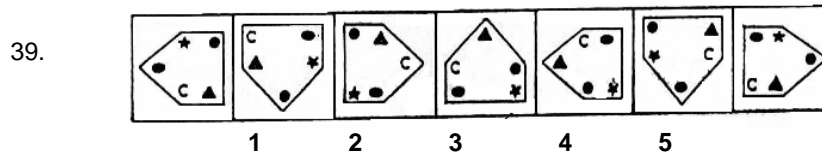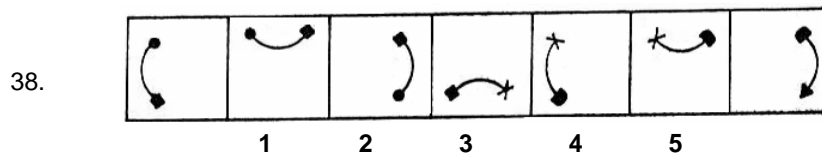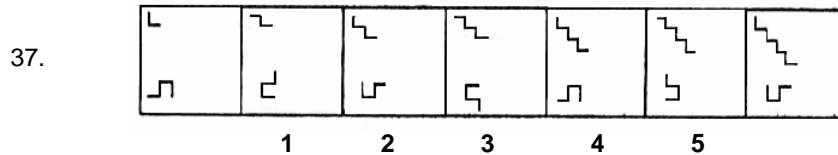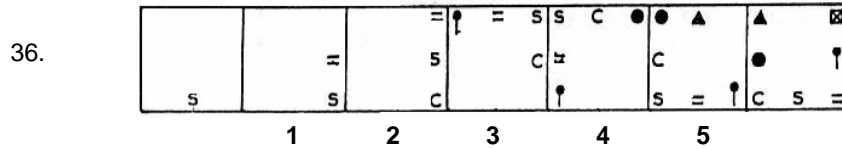   (5) No correction required

Q.36 – 40: In each of the following questions series begins with unnumbered figure on the extreme left. One and only one of the five numbered figures in the series does **not** fit into the series. The two unnumbered figures one each on the extreme left and the extreme right fit into the series. You have to take as many aspects into account as possible of the figures in the series and find out the one and only one of the five numbered figures which does **not** fit into the series. The number of that figure is the answer.

Study the following question.
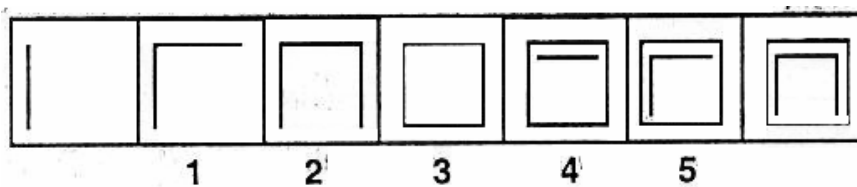
In this question the number of lines in the figures goes on increasing by one from left to right. If we go by this aspect of 'number of lines' only then there is no wrong figure in the series. But if we also consider the 'manner' in which the 'number of lines' in the figures goes on increasing from left to right we come to know that the figure No. 4 does **Not** fit into the series. Therefore, 4 is the answer.

_____

Now solve the following questions.

36.


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        1      2      3      4      5
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37.


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        1      2      3      4      5
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38.


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        1      2      3      4      5
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39.


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        1      2      3      4      5
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40.


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        1      2      3      4      5
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Q.41 – 45: Each of the questions below consists of a question and two statements numbered I and II are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and –

Give answer (1)   if the data in Statement I alone are sufficient to answer the question; while the data in Statement II alone are not sufficient to answer the question.

Give answer (2)   if the data in statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.

Give answer (3)   if the data in Statement I alone or in statement II alone are sufficient to answer the question.

Give answer (4)   if the data in both the statements I and II are not sufficient to answer the question.

Give answer (5)   if the data in both the statements I and II together are necessary to answer the question.

41. What is the code for "sky" in the code language?
    I.   In a code language 'sky is clear' is written as 'de ra fa'.
    II. In the same code language 'make it clear' is written as 'de ga jo'.

42 How is Mohan related to Divya?
    I.   Mohan is the only son of Divya's mother–in-law.
    II. Rani is Mohan's only sister.

43 Village 'R' is in which direction with respect to village 'D'?
    I.   Village 'R' is to the North of village 'T' which is to the West of village 'F'.
    II. Village 'D' is to the West of village 'T'.

44. How many children does 'M' have?
    I.   'H' is the only daughter of 'X' who is wife of 'M'.
    II. K and J are brothers of M.

45 What is Sunil's rank from the top in a class of 25 students?
    I.   Sunil ranks three ranks above Sudhir who ranks 18th from the bottom.
    II. Sunil rank from the top is two ranks below Sheela who ranks 23rd from the bottom.

Q.46 – 50: In each question below are three statements followed by three conclusions numbered I, II and III. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three given statements disregarding commonly known facts. Then decide which of the answers (1), (2), (3), (4) and (5) is the correct answer and indicate it on the answer sheet.

46 Statements :   Some chairs are tables. Some tables are drawers. All drawers are shelves.
    Conclusions :   I.   Some shelves are tables.
                    II.   Some drawers are chairs
                    III. Some shelves are drawers.
    (1) Only I & III follow   (2) Only I and either II or III follow   (3) Only II and either I or III follow
    (4) All I, II & III follow   (5) None of these

47. Statements: All trees are flowers. Some flowers are leaves. No leaf is bud.
    Conclusions :   I.   No bud is a flowers.
                    II.   Some buds are flowers.
                    III. Some leaves are trees.
    (1) Only II & III follow   (2) Only III follows   (3) Only either I or II follows
    (4) Either I or II and follow (5) None of these

48   Statements: All stones are rocks. Some rocks are bricks. Some bricks are cement.

Conclusions :   I.   Some cements are rocks.

II   Some cements are stones.

III.   No cement is stone.

(1) Only I and either II or III follow   (2) Only either II or III follows

(3) Only I & II follow   (4) All follow   (5) None of these

49.   Statements: All flats are buildings. All buildings are bungalows. All bungalows are apartments.

Conclusions: I.   Some apartments are flats.

II.   All flats are bungalows.

III.   Some bungalows are flats.

(1) None follows   (2) Only I & II follow   (3) Only II & III follow

(4) Only I & III follow   (5) All I, II & III follow

50   Statements: Some spectacles are lenses. Some lenses are frames. All frames are metals.

Conclusions I.   Some lenses are metals.

II.   Some metals are spectacles.

III   Some frames are spectacles.

(1) None follows   (2) Only I follows   (3) Only I and either II or III follow

(4) Only I and II follow   (5) None of these

Q.51 – 56: In the following series **two** numbers are **wrong**. One number is wrong just by exactly $\pm$ 1, whereas the other is wrong by a bigger margin. Find out the wrong number with the bigger margin. (The first and the last numbers in the series are correct)

51.   3   5   7   13   21   38   55

(1) 5   (2) 7   (3) 13   (4) 21   (5) 38

52.   4   3   2   3   6   18   45   157.5

(1) 3   (2) 2   (3) 6   (4) 18   (5) 45

53.   15   22   13   21   11   24   9   26

(1) 8   (2)13   (3) 21   (4) 24   (5) 9

54.   1   8   32   65   125   216   343   512

(1) 8   (2) 32   (3) 65   (4) 216   (5) 343

55.   2500   2401   2116   1937   1764   1600   1444

(1) 1600   (2) 1764   (3) 2116   (4)2401   (5) 1937

56.   1   3   3   8   24   243   6561   1594323

(1) 3   (2) 8   (3) 24   (4) 243   (5) 6561

Q.57 – 61: Study the following table to answer the given questions.

NUMBER OF CANDIDATES WHO REGISTERED (R), APPEARED (A) AND PASSED (P) FOR DIFFERENT PROGRAMMES FOR THE GIVEN YEARS
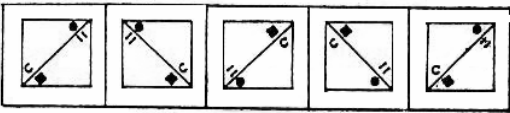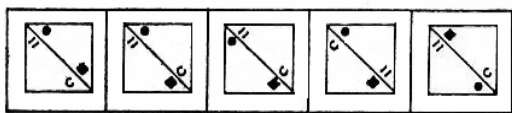
Prog. Year	A			B			C			D			E			F		
	R	A	P	R	A	P	R	A	P	R	A	P	R	A	P	R	A	P
1999	500	500	400	100	100	50	50	45	20	900	450	420	100	100	20	140	70	60
2000	600	550	400	110	110	55	50	46	20	1000	500	180	100	100	15	200	130	120
2001	550	525	410	160	160	90	50	44	20	1300	600	370	100	100	40	160	90	90
2002	800	700	550	190	190	110	70	60	30	1900	800	440	100	100	35	150	110	100
2003	850	825	600	300	300	200	70	65	30	1800	750	460	100	100	37	400	300	155
2004	990	950	750	350	345	290	90	85	35	1600	800	510	100	100	42	300	225	128

57. For which programme there seems to be fixed number decided to pass for different years?
    (1) A   (2) B   (3) C   (4) D   (5) E

58. In 2002, for Programme A, what is the percentage of passed over Registered?

    (1) 78.57   (2) 87.50   (3) 78.09   (4) $68\dfrac{3}{4}$ (5) None of these

59. For Programme B, which year is the percent increase in Registered from the previous year the maximum ?
    (1) 2003   (2) 2004   (3) 2002   (4) 2001   (5) None of these

60. How much is the difference in the number Appeared and Passed for Programme D for the given years?
    (1) 1410   (2) 1500   (3) 1620   (4) 4600   (5) None of these

61. In 2003, which Programme had the maximum percent of passed over Registered?
    (1) A   (2) B   (3) F   (4) E   (5) C

62. In a school the ratio of boys and girls is 3 : 2 respectively. When 6 more girls join this ratio becomes 6 : 5 . How many boys are there in the school?
    (1) 24   (2) 30   (3) 42   (4) Cannot be determined (5) None of these

63. If $x^2 – 7x = – 12$, what is the value of x?
    (1) – 3 or – 4   (2) 3 or 4   (3) 3 or – 4   (4) Cannot be determined
    (5) None of these

64. A boat running downstreams covers a distance of 10 kms in 2 hours. While coming back upstreams the speed of the boat in still water?
    (1) 2.5 kmph   (2) 4.5 kmph   (3) 3.5 kmph   (4) Cannot be determined
    (5) None of these

65. An article when sold at Rs. 4,500/-, incurred 10% loss. At what price should it be sold to earn 10% profit?
    (1) Rs. 5,000/-   (2) Rs. 4,950/-   (3) Rs. 5,445/-   (4) Rs. 5,500/-   (5) None of these
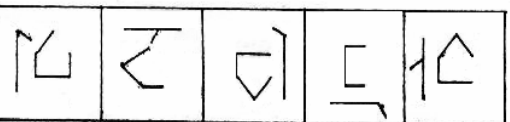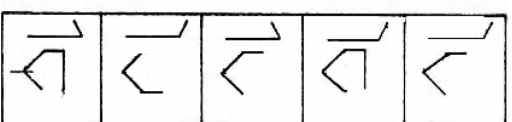
Q.66 – 75: In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left. If the sequence were continued?
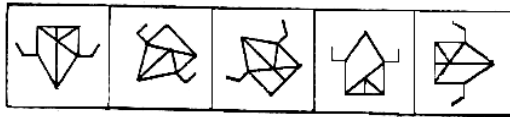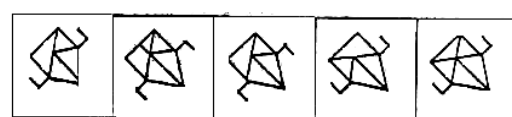
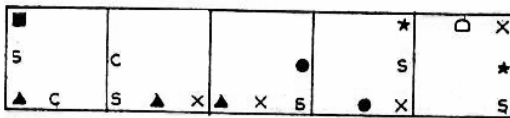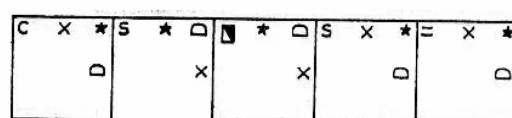**PROBLEM FIGURES**   **ANSWER FIGURES**

66.

                                           1   **2**   **3**   **4**   **5**

67.
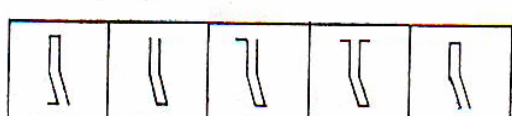
                                           1   **2**   **3**   **4**   **5**

68.
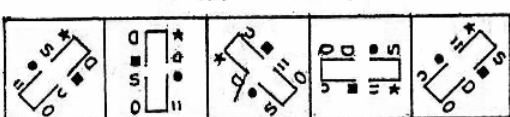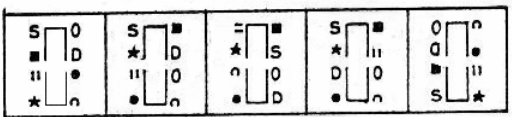
                                           1   **2**   **3**   **4**   **5**

69.
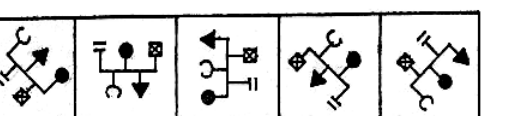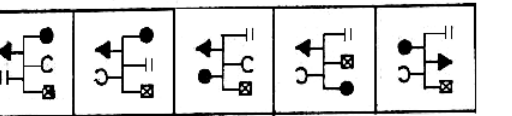
                                           1   **2**   **3**   **4**   **5**

70.
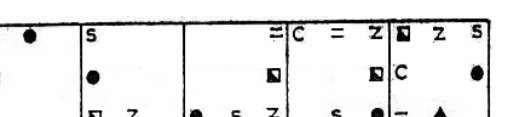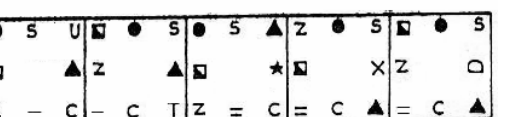
                                           1   **2**   **3**   **4**   **5**

71.

                                           1   **2**   **3**   **4**   **5**

72.

                                           1   **2**   **3**   **4**   **5**

73.

                                           1   **2**   **3**   **4**   **5**
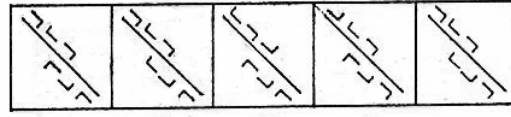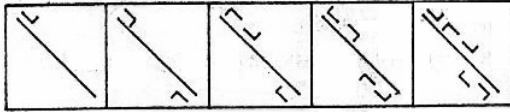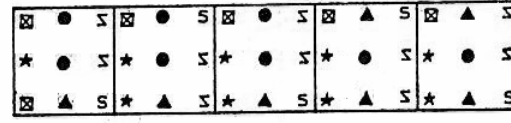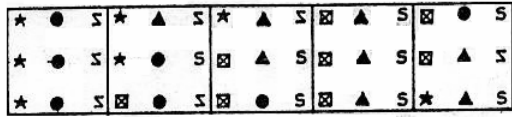
74.

1   2   3   4   5

75.

1   2   3   4   5