

PAPER-I : MATHEMATICS AND LANGUAGE ABILITY

Time : 2 Hrs.

Max. Marks : 200

Part-A : Mathematics

Section-I

(Each question carries two marks.)

1. Estimate the difference of 879 and 338 to the nearest hundred.
2. Write 15 m as a percentage of 1000 km.
3. Find LCM of 120, 210 and 225.
4. Arrange $\frac{1}{3}$, $\frac{3}{10}$, $\frac{5}{6}$, $\frac{2}{5}$ in ascending order.
5. Find the sum of $1\frac{3}{5}$ and $2\frac{7}{10}$.
6. An aeroplane covers 1020 kms in an hour.
How much distance will it cover in $4\frac{1}{6}$ hours.
7. Convert 131°F into Celsius scale.
8. Convert 2222 hours into days and hours.
9. One of the two equal angles of an Isosceles triangle measures 55° . Find the measure of all the angles of triangle.
10. Find the radius of a circle whose circumference is 79.2 cm. Given that $\pi = \frac{22}{7}$.

Section-II

(Each question carries three marks.)

11. Find the square numbers lying between 75 and 225.
12. Simplify: $125 - 25 \times 125 + 25 + 25$.

13. Sudha scored 23 marks out of 30 in maths and 29 marks out of 50 in Hindi. In which subject did she perform better and by what percentage?
14. Find the HCF of 902, 1394 and 3321.
15. Jubaida took a loan of ₹ 4000 on 12% annual interest. After 3 years how much money she will have to return?
16. Find the square root of
(a) $6\frac{9}{36}$ (b) $5\frac{41}{16}$
17. A baby elephant drinks around 12 litre of milk every day. How much milk will it drink in two years?
18. John plans to tile his kitchen floor with square tiles. Each side of the tile is 10 cm. His kitchen is 2.2 M long and 1.8 M wide. How many tiles will John need?
19. There are 24 Laddoos in 1 kg. How many Laddoos will be there in 8 kg? If 16 Laddoos can be packed in 1 box, how many boxes are needed to pack all the laddoos?
20. Find the mean of first ten even numbers.

Section-III

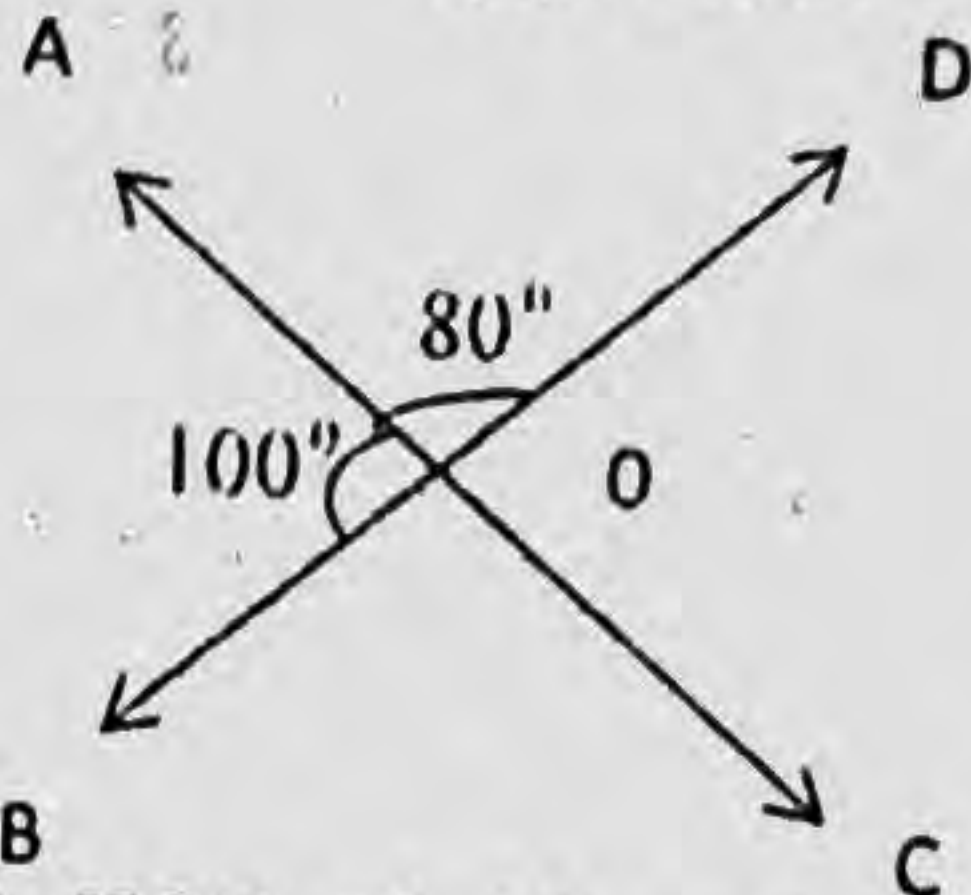
(Each question carries five marks.)

21. Annual Income of Rohan is ₹ 6,00,000. He spends ₹ 99,250 on food, ₹ 36,750 on clothes and ₹ 1,11,500 on other expenditures annually. What is his annual saving? What % of his income does he save in a year?

22. (a) Find the value of following angles:

(i) $\angle BOC$

(ii) $\angle COD$

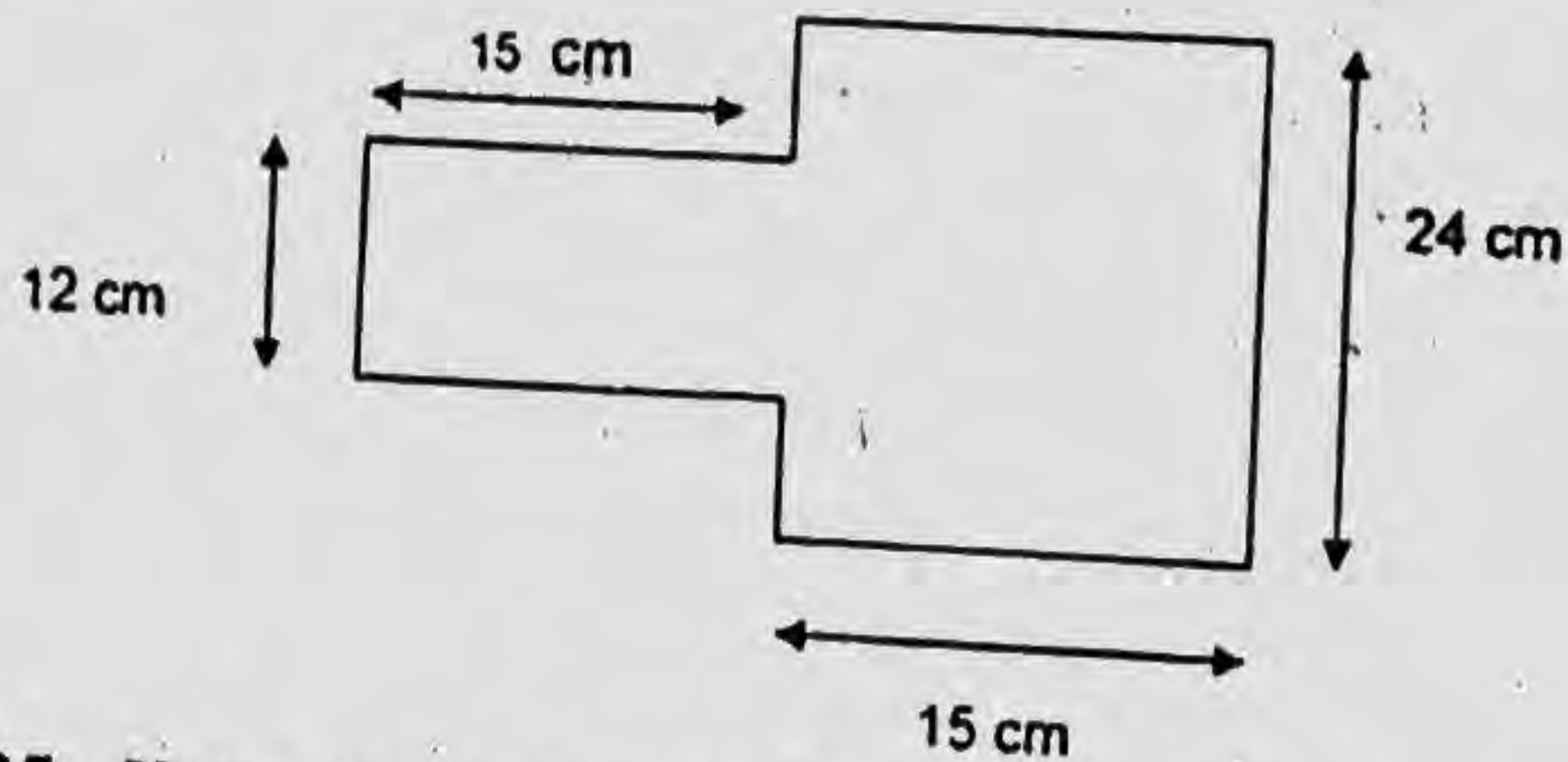


(b) Find HCF of 20 and 70 by prime factorization method.

23. Simplify:

$$0.2[3.5 - 0.3\{2.5 + 1.3(3.6 + 1.4)\}]$$

24. Find out perimeter and area of the given diagram.



25. How many stones of 0.50 m^2 can be fixed in a court yard of length 15 m and width 10 m. if cost of fixing one stone is ₹ 2.50, what will

be the expenditure on fixing stones in the courtyard?

26. An alloy contains 15% Carbon, 25% Zinc and rest is Copper. In 60 Kg alloy, find the quantity of each metal.

27. Fill in the blanks:

(a) $\frac{6}{21} = \frac{?}{7}$

(b) $.01 = \frac{1}{?}$

(c) Largest 7 digit number is

(d) Radius = $\frac{\text{Diameter}}{?}$

(e) In 75897, place value of 8 is

28. The denominator of a fraction is greater than its numerator by 3. If 3 is subtracted from the numerator and 2 is added to its denominator, the new number become $\frac{1}{5}$. Find the original number.

29. Out of 40 students of a class, 60% passed in first division, 30% in second division and remaining in third division. Find out the number of students in each category?

30. (a) A shopkeeper sells a box costing ₹ 900 giving 15% discount. Find out the sale price of the box?

(b) The HCF and LCM of two number is 18 and 252 respectively. If one number is 126 find out another number?

PART-B : LANGUAGE ABILITY

1. Write 15 sentences on anyone of the following topics: (15)

My Friend or Aim of my life

2. Read the following passage carefully and answer the questions that follow:

(5 × 3 = 15)

Florence Nightingale was born on the 15th May, 1820 at Florence in Italy and her parents called her after the name of the city where she was born. Her main ambition was to be a nurse and so she gave up all thoughts of marriage and personal happiness. She spent years visiting hospital after hospital. Day and night she visited every bed in the hospital to see that no patient was neglected and that all were as comfortable as possible. However hard she might have worked all day, every night she would take her lamp and move from bed to bed. 'The Lady with the Lamp' the soldiers called her and that is the name by which the world has remembered her ever since.

- (a) Where was Florence Nightingale born?
(b) Why her parents named her Florence Nightingale?
(c) Why Florence Nightingale was called 'The Lady with the Lamp'?
(d) Give opposite of 'comfortable'?
(e) What did she do every night with a lamp in her hand?

3. Make a sentence of your own for each underlined word given in the following passage. (Do not copy any sentence from the given paragraph.) (5 × 2 = 10)

People who live in regions covered with forests and surrounded by hills generally believe that the desert is a vast stretch of dry, hot and sandy land. But those who have studied it, find the desert quite beautiful. It is not entirely uninhabited either. A variety of people, animals and plants make the desert their home.

- (a)
(b)
(c)
(d)
(e)

4. Form meaningful sentences by rearranging the words in proper order: (5 × 2 = 10)

- (a) a good/exercise/swimming/is
(b) Middle East/india/to/the/exporting/is/onions
(c) was/John/drinking /tea
(d) man/a strong /Sardar Patel/was
(e) named/Diamond/had/Newton/little dog/a

5. Give one word for the following: (5 × 1 = 5)

- (a) One who knows everything
.....
(b) A building in which monks live
.....
(c) A person whose profession is to keep accounts
(d) All the customs and beliefs of a society
.....
(e) Eater of flesh

6. Choose the correct article (a, an or the) and fill in the blanks. (5 × 2 = 10)

- (a) Here is book I borrowed from you yesterday.

PAPER-II : INTELLIGENCE TEST*

Time : 40 Minutes.

Max. Marks : 100

Directions (Qs. 1 to 6): In the following questions, select the number(s)/letters from the given options for completing the given series.

1. 27, 28, 25, 25, 23, 22, 21, ?
(a) 20 (b) 21
(c) 19 (d) 18
2. 80, 63, 72, 72, 64, 81, 56, ?
(a) 96 (b) 98
(c) 89 (d) 90
3. 0, 5, 22, 57, ?, 205
(a) 198 (b) 116
(c) 172 (d) 92
4. R K F ? B
(a) D (b) C
(c) E (d) B
5. LAZ, NEX, PIV, ?
(a) SLS (b) QNS
(c) RMT (d) RMS
6. -bbcaa-bcaa-bc-a-bca
(a) bacab (b) abbab
(c) abcba (d) bcaab
7. In a certain code LIBERATE is written as 56403170, TRIBAL will be written in the same code as:

- (a) 734615 (b) 736415
(c) 136475 (d) 034615
8. In a certain language, (a) 'FOR' stands for 'old is gold'; (b) 'ROT' stands for 'gold is pure'; (c) 'ROM' stands for 'gold is costly'. How will 'pure old gold is costly' be written?
(a) TFROM (b) FOTRM
(c) FTORM (d) TOMRF
9. Facing the West direction, Priya jogs for 20 m, turns left and goes further 40 m. She turns left again and jogs for 20 m. Then she turns right to go 20 m to reach the park. How far is the park from her starting point and in which direction?
(a) 20 m South (b) 40 m West
(c) 60 m South (d) 100 m East
10. Pointing to a woman in the photograph a man said, "She is the daughter of my grandmother's only son. How is the woman related to the man?
(a) Mother (b) Daughter
(c) Sister-in-law (d) Sister
11. If the following words are arranged in natural order, what will come in the last place in ascending order?
1. Captain

2. Brigadier
 3. Major
 4. Lieutenant-General
 5. Lieutenant
- (a) Lieutenant-General (b) Brigadier
(c) Captain (d) Major

12. What would be the proper order of the following :

- | | |
|--------------|---------------|
| 1. Decameter | 2. Meter |
| 3. Kilometer | 4. Centimeter |
| 5. Milimeter | |
- (a) 1 4 3 2 5 (b) 5 4 1 2 3
(c) 5 4 3 2 1 (d) 5 4 2 1 3

Directions (Qs. 13-17) : In the questions given below one term is missing. Based on the relationship of the two given words/numbers find the missing term from the given options.

13. Physicist : Physics :: ? : Anatomy
(a) Botany (b) Botanist
(c) Body (d) Biologist
14. Frequently : Always :: Seldom : ?
(a) Often (b) Rarely
(c) Occasionally (d) Never
15. RRS : XMW :: ITB : ?
(a) PNE (b) NOG
(c) RSW (d) OOF
16. BYDW : FVHT :: GQIO : ?
(a) JLNP (b) QSTR
(c) KMOL (d) KNML
17. Which number will come in the place of question mark?
25 : 81 :: 36 : ?
(a) 121 (b) 93
(c) 65 (d) 103

Directions (Qs. 18-24): In each of the following questions, there are four options. Three numbers/words in these options, are alike in certain manner. Only one number/word does not fit in. Choose the one which is different from the rest.

18. (a) Tutor (b) Principal
(c) Pupil (d) Professor
19. (a) Pond (b) River
(c) Stream (d) Brook

20. (a) Quotation (b) Duty
(c) Tax (d) Octroi
21. (a) 3215 (b) 9309
(c) 4721 (d) 2850
22. (a) 24 (b) 90
(c) 54 (d) 36
23. (a) 3730 (b) 6820
(c) 5568 (d) 4604
24. (a) 2587 (b) 7628
(c) 8726 (d) 2867
25. In the following list of numerals, how many 3s are followed by 3, but NOT preceded by 3?
2 4 6 3 3 1 5 7 8 3 3 3 4 6 2 3 3 3 3 9 7
2 3
(a) 1 (b) 2
(c) 3 (d) 4
26. If the + and × signs of the following equations are inter-changed, which will be the correct equation?
(a) $7 \times 5 + 3 = 20$ (b) $4 + 9 \times 1 = 42$
(c) $6 \times 5 + 8 = 46$ (d) $2 + 11 \times 4 = 28$
27. If '+' stands for multiplication, '×' stands for addition, '÷' stands for subtraction and '-' stands for division, then what will be the result of the following equation?
 $7 \times 4 \div 10 \times 2 + 5 = ?$
(a) 7 (b) 0
(c) 11 (d) 15
28. If the day before yesterday was Thursday, when will Sunday be?
(a) Tomorrow
(b) Day after tomorrow
(c) Today
(d) Two days after today
29. If the seventh day of a month is three (3) days earlier than Friday, what day will it be on the nineteenth day of the month?
(a) Sunday (b) Monday
(c) Wednesday (d) Friday

Directions (Qs. 30 and 31): In the following questions select the right option which indicates the correct code for the word or letter given in the question.

30. If 'w' is coded as 'a', 's' as 'r' and 'r' as 'w', how will 'answer' be written?

- (a) wnsaes (b) anraew
(c) anrwas (d) wnraes

31. In certain military code, SYSTEM is written as SYSMET, and NEARER as AENRER, what will be the code for FRACTION?

- (a) CRAFNIOIT (b) FRCAITNO
(c) CARFNIOIT (d) FRACNOIT

32. A and B are two brothers. C is sister of B. D is sister of E. E is son of A. Who is D's uncle?

- (a) D (b) E
(c) B (d) C

Directions (Qs. 33-35) : In each of the following series determine the order of the letters. Then from the given options select the one which will complete the given series.

33. B A F E J I P O ? U

- (a) V (b) T
(c) S (d) Q

34. V R O K ? D

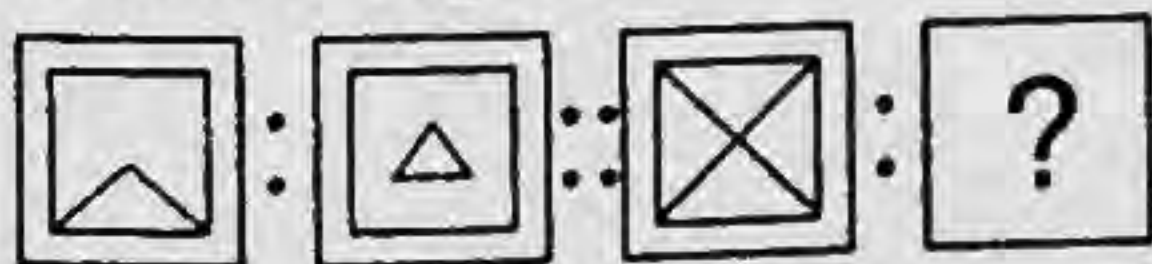
- (a) L (b) I
(c) H (d) J

35. CFI, IKM, OPQ, ?

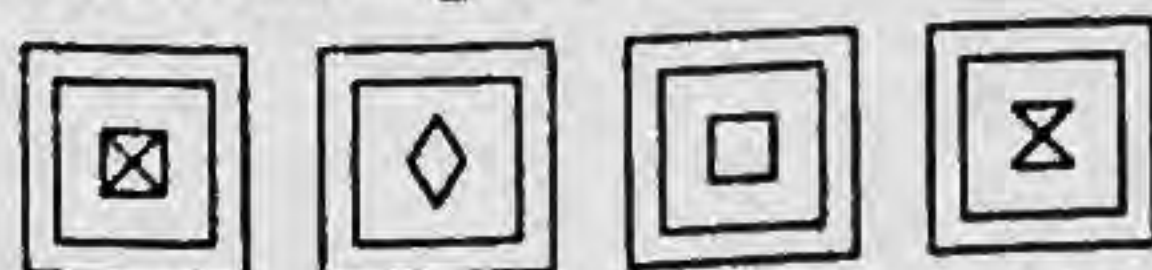
- (a) UUU (b) UST
(c) VUS (d) TUV

Directions (Qs. 36-40): The second figure in the first unit of the Problem Figures bears a certain relationship to the first figure. Similarly, one of the figures in the Answer Figures bears the same relationship to the first figure in the second unit of the Problem Figures. Locate the figure which would fit the question mark.

36. Problem Figures

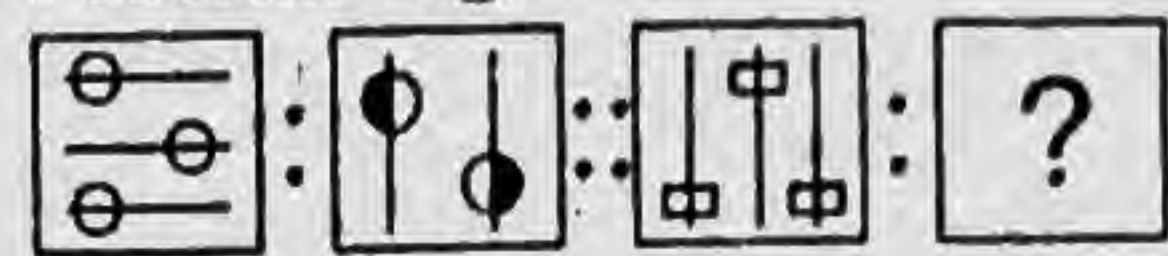


Answers Figures

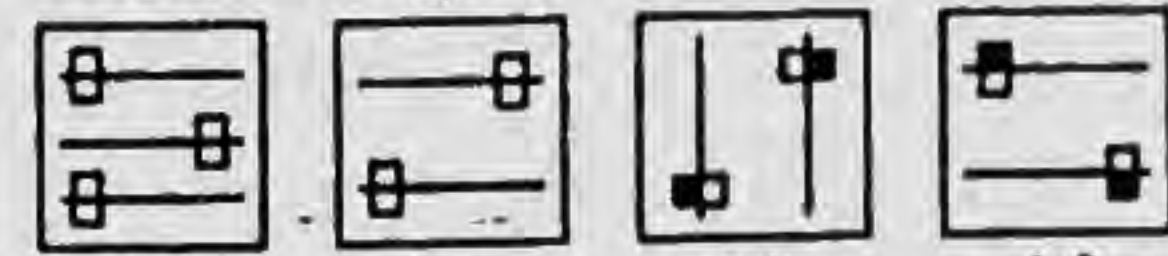


- (a) (b) (c) (d)

37. Problem Figures

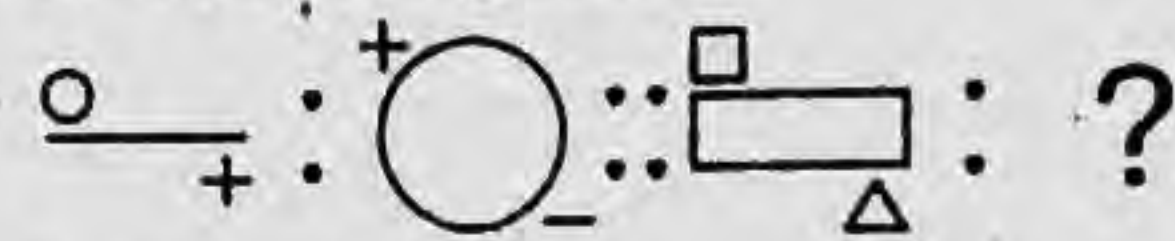


Answer Figures

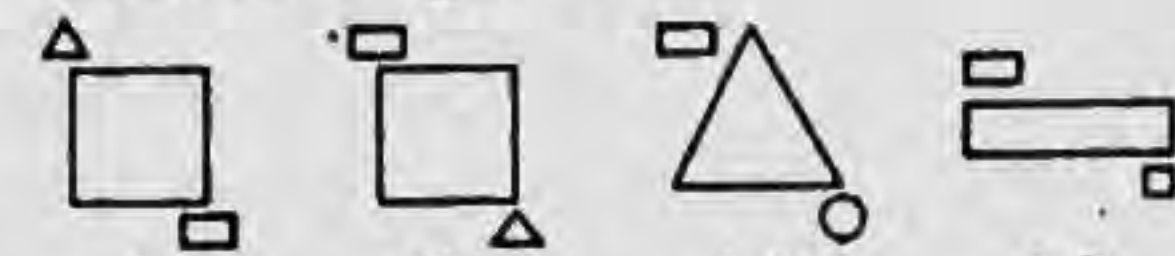


- (a) (b) (c) (d)

38. Problem Figures

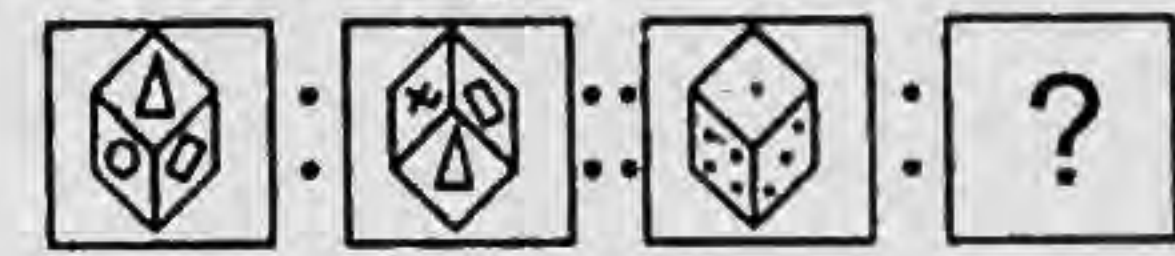


Answer Figures

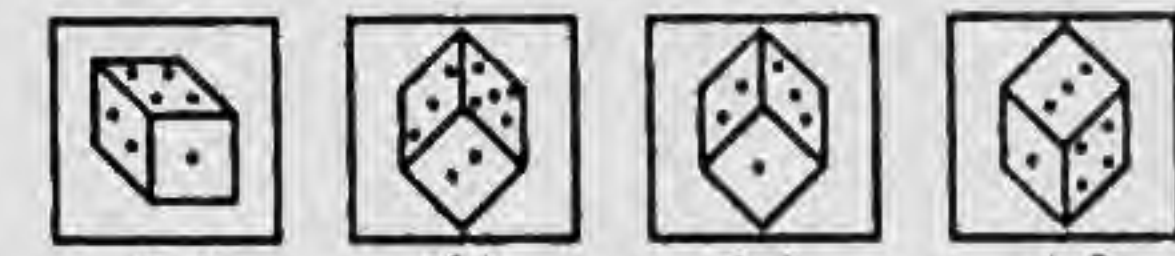


- (a) (b) (c) (d)

39. Problem Figures

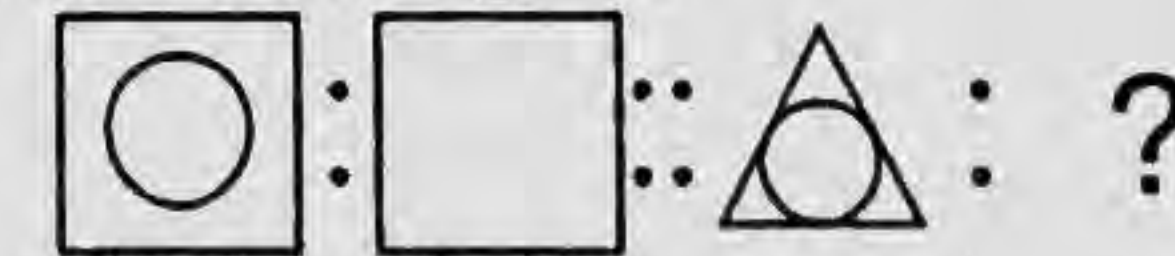


Answer Figures

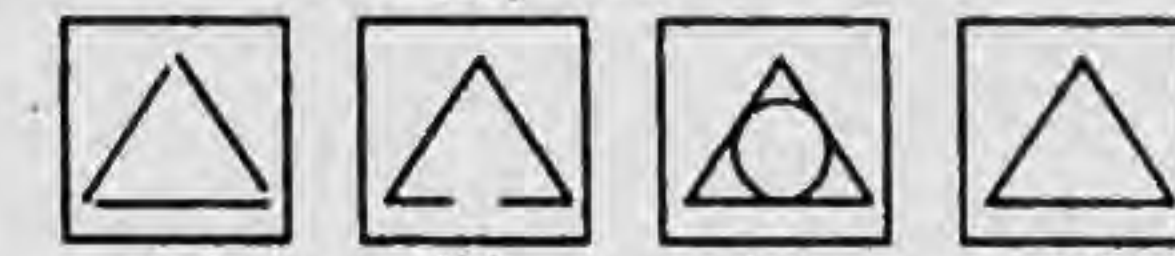


- (a) (b) (c) (d)

40. Problem Figures



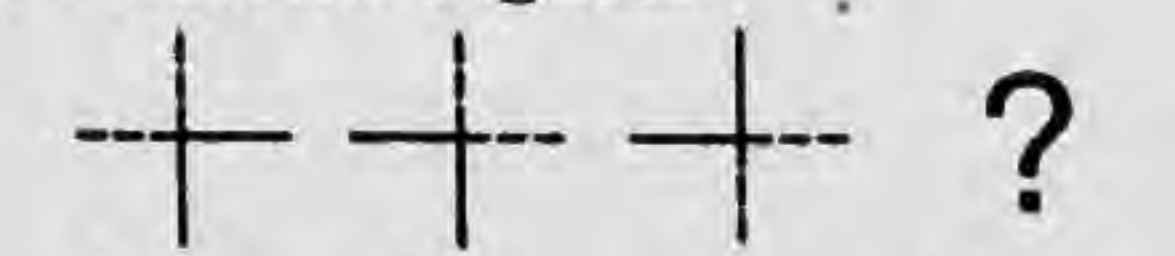
Answer Figures



- (a) (b) (c) (d)

Direction (Qs. 41-45): Each of the following questions consist of problem figures followed by answer figures. Select a figure from amongst the answer figures which will continue the same series or pattern as established by the problem figures.

41. Problem Figures

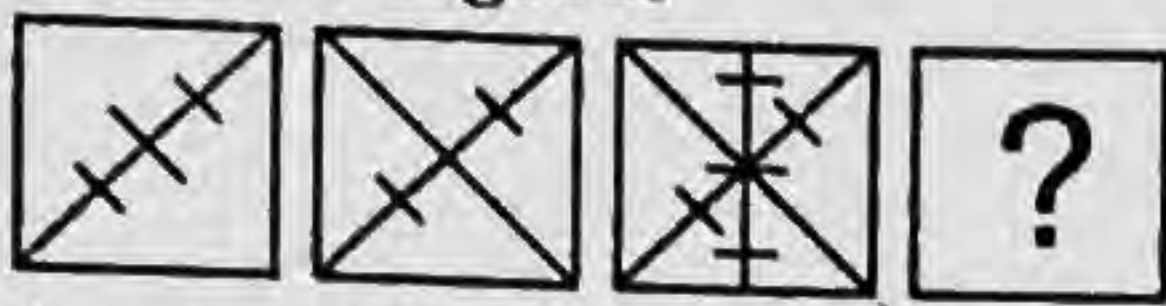


Answer Figures

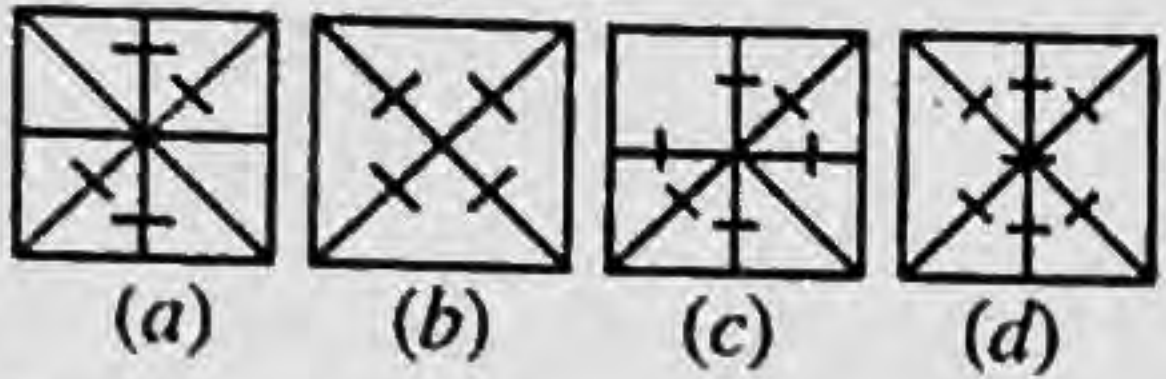


- (a) (b) (c) (d)

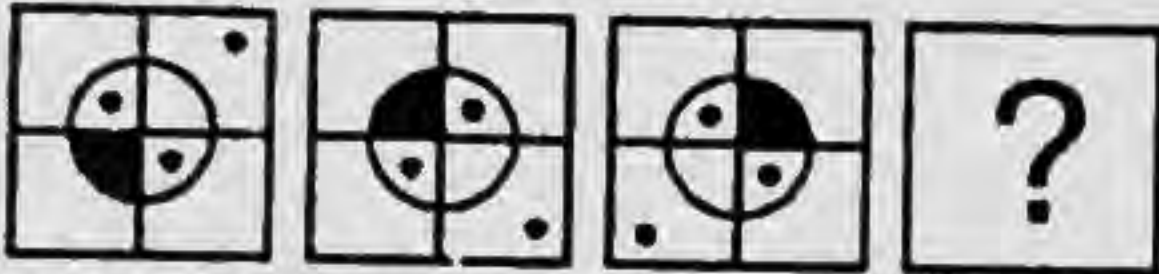
42. Problem Figures



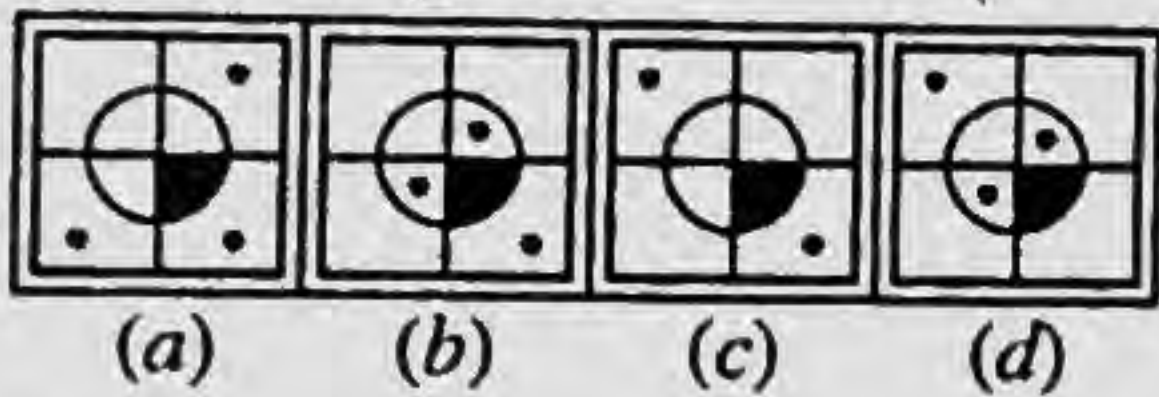
Answer Figures



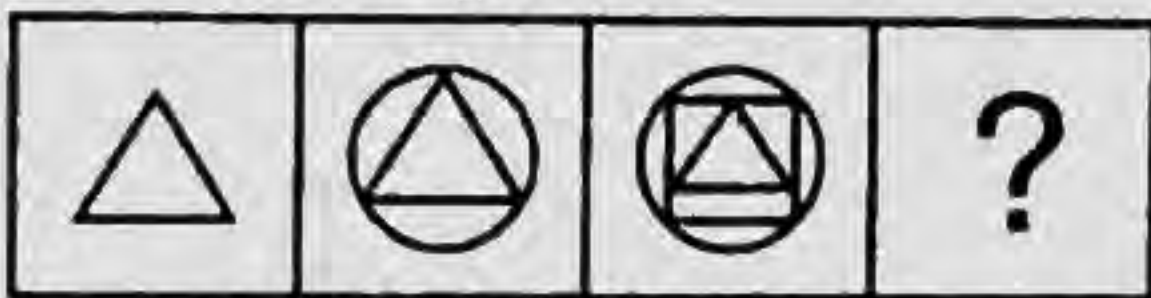
43. Problem Figures



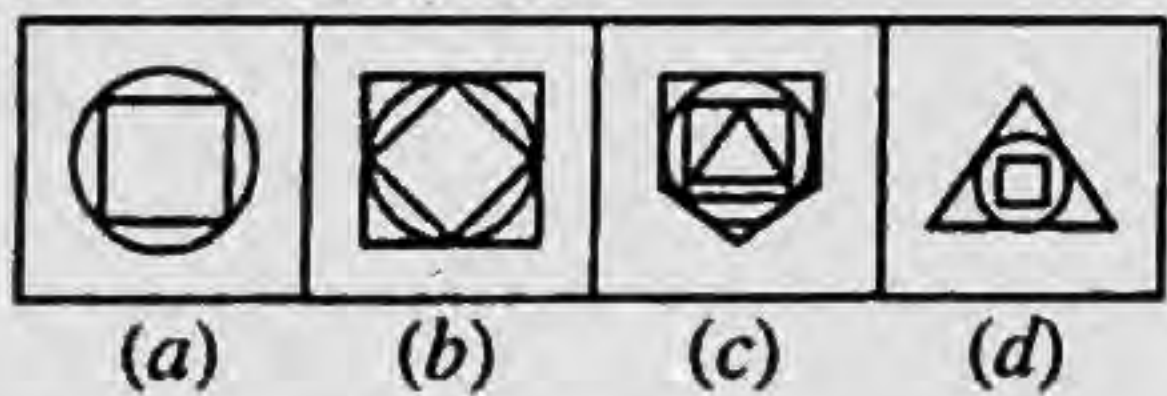
Answer Figures



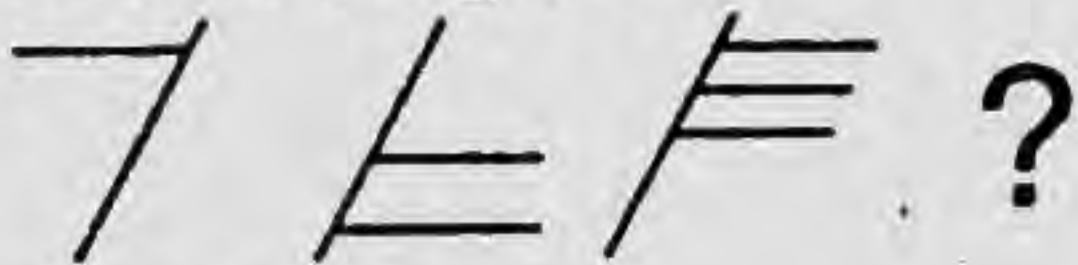
44. Problem Figures



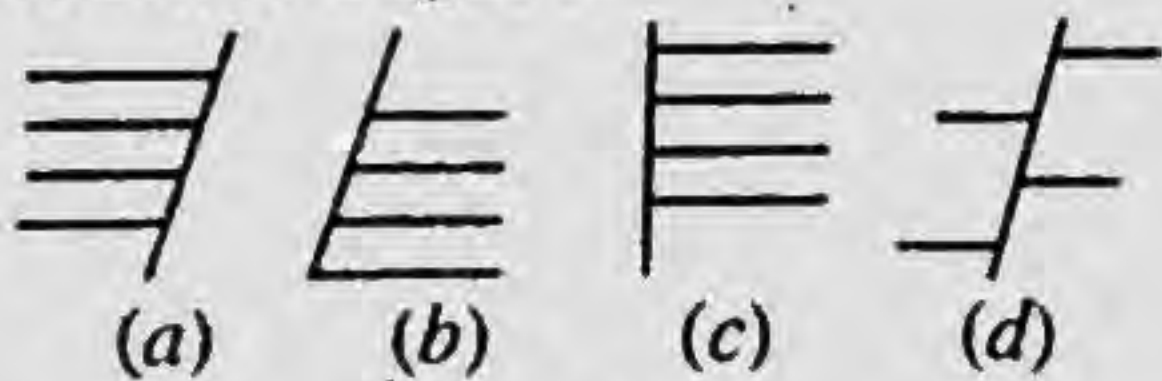
Answer Figures



45. Problem Figures

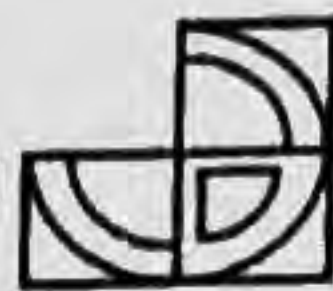


Answer Figures

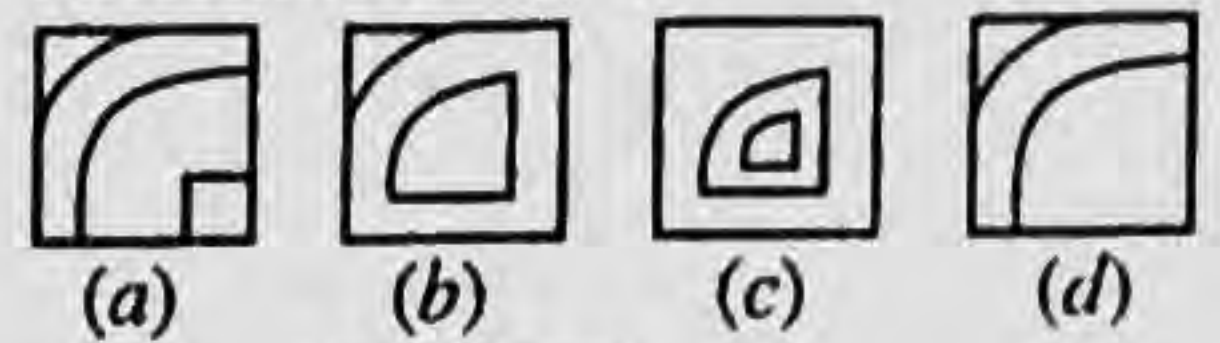


Directions (Qs. 46-50): In each question, which one of the alternative figures will complete the given figure pattern?

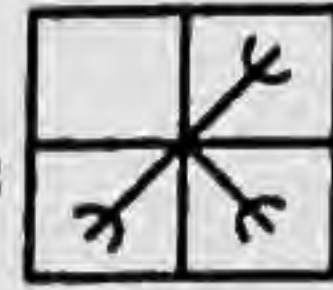
46. Pattern



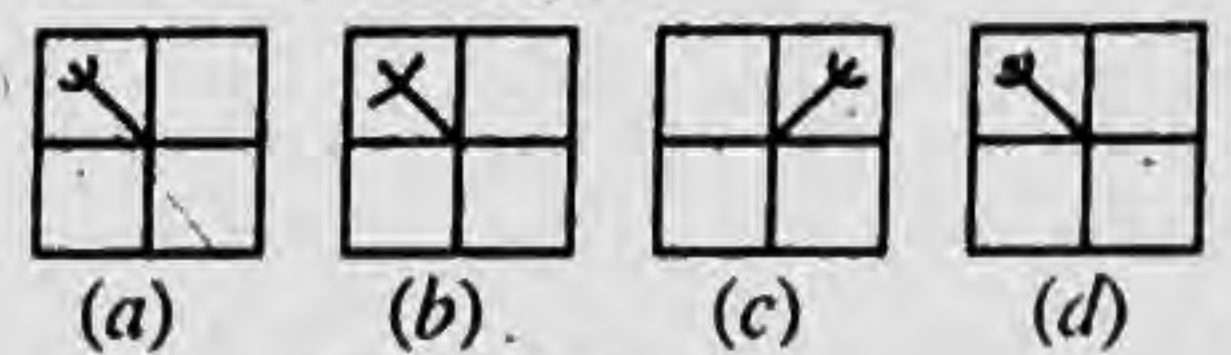
Alternative figures



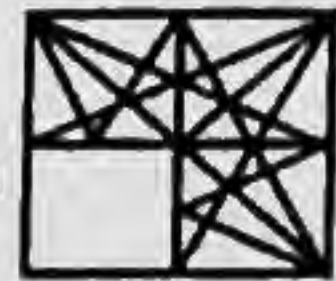
47. Pattern



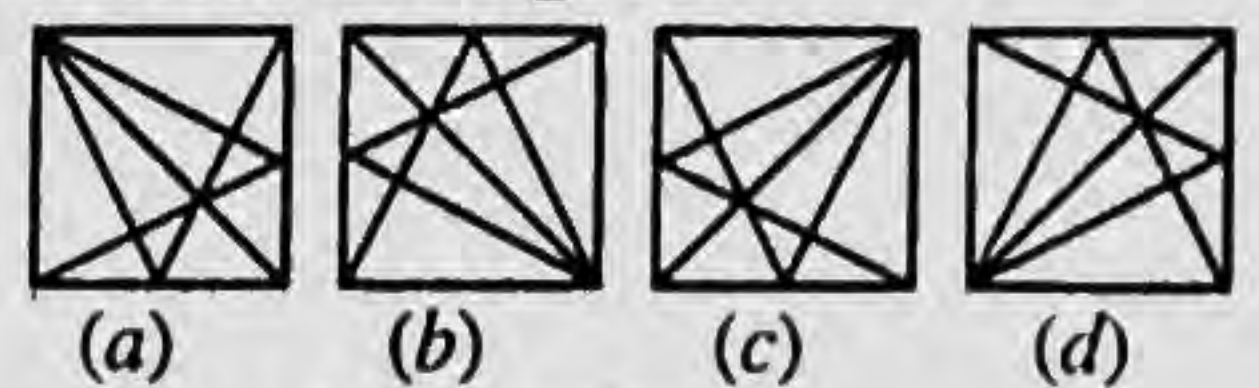
Alternative figures



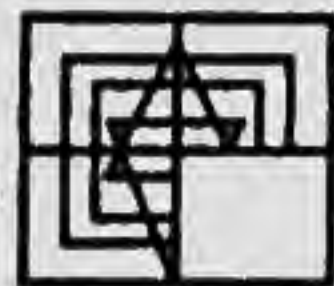
48. Pattern



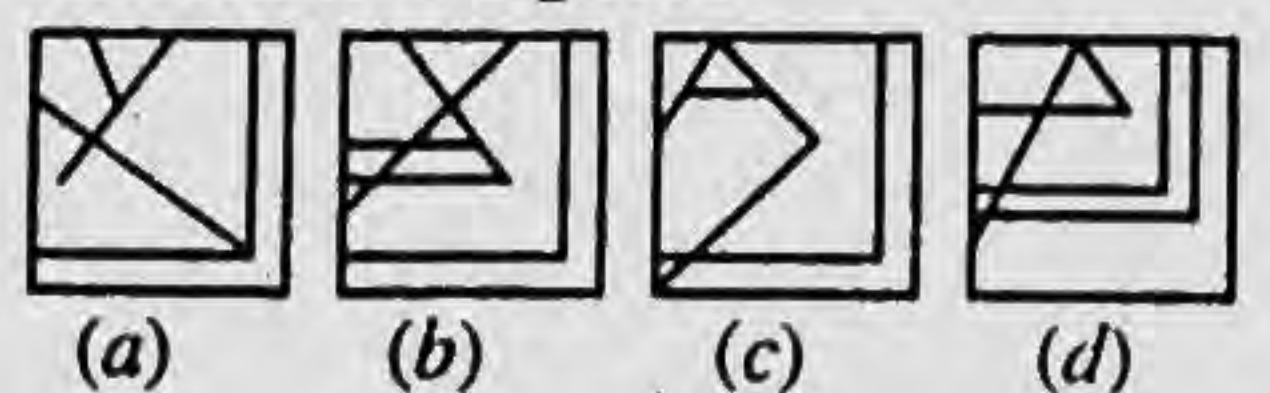
Alternative figures



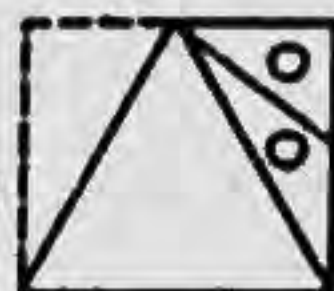
49. Pattern



Alternative figures



50. Pattern



Alternative figures

