

Mathematics

Full Syllabus Test

VII (ICSE)

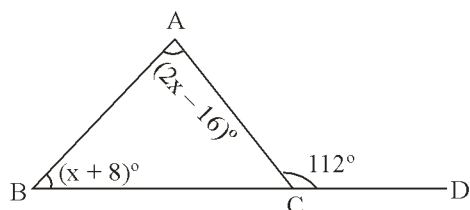
Full Marks : 80

Time : 2 hr. 30 min

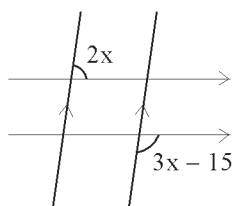
SECTION – A

(Compulsory)

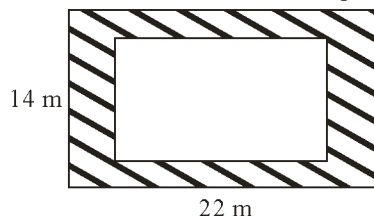
1. (a) Find $3\frac{1}{8}\%$ of 75. 3
- (b) Take away $3p - 2q + 3r + 5$ from $5p + 7q - 2r + 4$. 3
- (c) Find the value of x. 4



2. (a) Find the area of square whose perimeter is 48 cm. 3
- (b) A dealer gave 9% discount on an electric fan and charges Rs. 728 from the customer. Find the marked price of the fan. 4
- (c) The sum of two numbers is 90 and the greater number exceeds thrice the smaller by 14. Find the number. 3
3. (a) If A can do a piece of work in 30 days and B can do a same piece of work in 20 days. Find the number of days they will take to complete the work, working together. 4
- (b) Solve: $\frac{x+7}{3} = 1 + \frac{3x-2}{5}$ 3
- (c) The total surface area of a cube is 384 cm^2 . Find the volume of the cube. 3
4. (a) On a selling a bag for Rs. 704, a shopkeeper suffer a loss of 12%. Find the cost price of a bag. 3
- (b) Find the value of x from the given diagram. 3



- (c) In the given figure, find area of the path which is of uniform width 1.9 m inside the rectangle. Also, find the total cost of levelling the path at Rs. 250 per sq. metre. 4

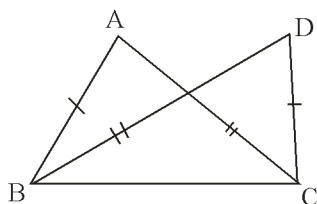


SECTION – B

(Answer any four)

5. (a) Multiple: $(3x + 4y)(5x - 6y)$ 3
- (b) Find the volume of cube, whose total surface is 54 cm^2 . 3

- (c) Prove that $\triangle ABC$ and $\triangle DCB$ are congruent triangle. 4



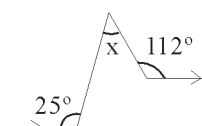
6. (a) 20 labourer can dig a pond in 12 days. How many days will it take 16 labourer to dig the same pond. 3
 (b) Factorise: $16x^2 - 49y^2$ 3
 (c) The following table shows the number of students in various classes in a hobby school. 4

Hobby	Computer	Painting	Pottery	Paper Cutting	Glass work
Students	180	150	27	75	108

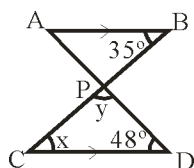
Represent the above data by a pie chart.

7. (a) If $a + b = 6$, $ab = 10$, find the value of $a^2 + b^2$. 3
 (b) What sum of money will fetch Rs. 661.50 a simple interest in one year nine months at $6\frac{2}{3}\%$ per annum. 3
 (c) Find three consecutive integers such that the third integer is one and half times of the first integer. 4
 8. (a) Subtract $3x + 5y - 4z + 3$ from the sum of $5x - 3y + 7z - 2$ and $7y - 6x + 5z + 11$. 3
 (b) An angle is one fourth of its complement, find the size of the angle. 3
 (c) Find the cost of flooring a room 6.5 m by 5 m with square tiles of side 25 cm at the rate of Rs. 1880 per hundred tiles. 4
 9. (a) Solve: $\frac{2x+1}{10} - \frac{3-2x}{15} = \frac{x-2}{6}$ 3
 (b) Divide Rs. 975 among Parul and Pratyush in the ratio 14 : 11. 3
 (c) The number of goals scored by a football team in different matches is given below:
 3,1,0,4,6,0,0,1,1,2,2,3,5,1,2,0,1,0,2,3,9,2,0,1,0,1,4,1,0,2,5,1,2,2,3,1,0,0,0,1,1,0,2,3,0,1,5,2,0.
 Construct simple frequency distribution table. 4

10. (a) Find the value of x . 3



- (b) Find the fourth proportion
 72, 168, 3 3
 (c) The cost of levelling a square lawn at Rs. 2.50 per square metre is Rs. 13322.50. Find the cost of fencing it at the rate of Rs. 5 per metre. 4
 11. (a) If 9.5% of a number is 76. Find the number. 3
 (b) Find the value of x and y . 3



- (c) Gurpreet sells two watches for Rs. 1955 each, gaining 15% on one and losing 15% on the other. Find her gain or loss percent in the whole transaction. 4