

Mathematics Full Syllabus Test

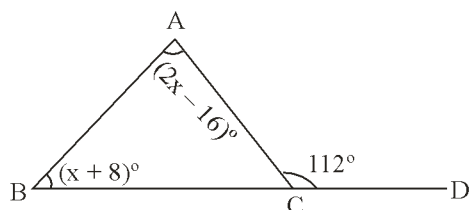
VII (CBSE)

Full Marks : 80

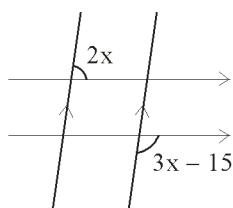
Time : 3 hrs.

SECTION – A (Compulsory)

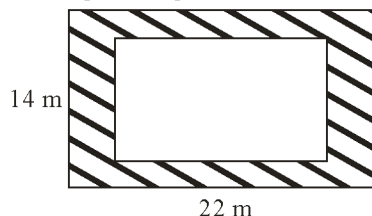
1. (a) Find $3\frac{1}{8}\%$ of 75. 3
- (b) Take away $3p - 2q + 3r + 5$ from $5p + 7q - 2r + 4$. 3
- (c) Find the value of x. 4



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. 3
- (c) The sum of two numbers is 90 and the greater number exceeds thrice the smaller by 14. Find the number. 4
3. (a) Simplify: $\frac{10 \times 5^{n+1} + 25 \times 5^n}{3 \times 5^{n+2} + 10 \times 5^{n+1}}$ 4
- (b) Solve: $\frac{x+7}{3} = 1 + \frac{3x-2}{5}$ 3
- (c) The circumferences of two circles are in the ratio 3 : 4. Find the ratio of their areas. 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. 4



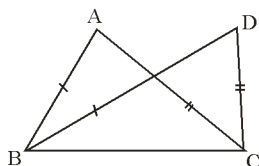
SECTION – B (Answer any four)

5. (a) Multiple: $(3x + 4y)(5x - 6y)$ 3
- (b) The data given below shows the average rainfall in Udaipur from June to November of a certain year. Draw a bar graph to represent this information. 3

Month	June	July	Aug	Sept	Oct	Nov
Average rainfall	25 cm	30 cm	40 cm	20 cm	10 cm	5 cm

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

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6. (a) 20 labourer can dig a pond in 12 days. How many days will it take 16 labourer to dig the same pond.

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- (b) A dice is thrown 100 times and the outcomes are noted as given below:

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Outcome	1	2	3	4	5	6
Frequency	21	14	18	15	23	9

When a dice is thrown at random, what is the probability of getting a (i) 3, (ii) 6, (iii) 4, (iv) 1?

- (c) Construct a $\triangle ABC$ in which $AB = AC = 5.2$ cm and $\angle A = 120^\circ$. Draw $AD \perp BC$.

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7. (a) If $a + b = 6$, $ab = 10$, find the value of $a^2 + b^2$.

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- (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.

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- (c) Find three consecutive integers such that third is one and half times of the first.

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8. (a) Subtract $3x + 5y - 4z + 3$ from the sum of $5x - 3y + 7z - 2$ and $7y - 6x + 5z + 11$.

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- (b) An angle is one fourth of its complement, find the size of the angle.

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- (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.

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9. (a) Solve: $\frac{2x+1}{10} - \frac{3-2x}{15} = \frac{x-2}{6}$

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- (b) Divide Rs. 975 among Parul and Pratyush in the ratio 14 : 11.

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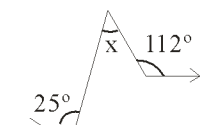
- (c) The number of goals scored by a football team in different matches is given below:

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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.

10. (a) Find the value of x.

3



- (b) Find the fourth proportion
72, 168, 3

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- (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.

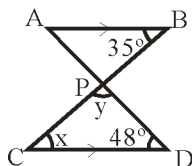
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11. (a) If 9.5% of a number is 76. Find the number.

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- (b) Find the value of x and y.

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- (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.

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