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CBSE Sample Paper Class 8 Mathematics 2022-23

Subject: Mathematics (गणित) Class: 8 (आठवीं) Maximum Marks: 80 (अधिकतम अंक) Duration: 2 hours (2 घंटे)

Note: The question paper consists of two parts A and B. Part A contains objective type questions, and Part B contains subjective type questions.

Part A: Objective Type Questions (Each question carries 1 mark)

1. What is the value of 'x' in the equation: 3x - 7 = 14? (a) 5 (b) 7 (c) 9 (d) 11

2. If the radius of a circle is 7 cm, what is its circumference? (a) 14 cm (b) 22 cm (c) 44 cm (d) 154 cm

3. Find the missing number in the pattern: 3, 6, 9, __, 15, 18. (a) 10 (b) 12 (c) 13 (d) 21

Part B: Subjective Type Questions

4. (a) Solve the equation: 2x + 5 = 17 and find the value of 'x'. (b) If the cost of one pen is Rs. 8, find the cost of 5 pens.

5. (a) Find the area of a rectangle with length 12 cm and breadth 8 cm. (b) The perimeter of a square is 40 cm. Find the length of one side.

6. (a) A number is increased by 25% to make it 250. Find the original number. (b) Express 3 hours 45 minutes as a fraction of 5 hours.

7. (a) The pie chart below represents the favorite subjects of students in a class. If the total number of students is 80, find the number of students who like Science.

(b) Convert the following fraction into a decimal: 5/8.

8. (a) Solve the pair of equations: 2x + 3y = 11 4x - y = 9

(b) The average of 5 numbers is 32. If one number is excluded, the average becomes 28. Find the excluded number.

9. (a) A shopkeeper gives a discount of 15% on the marked price of an item. If the marked price is Rs. 800, find the selling price after the discount. (b) If the volume of a cube is 512 cubic centimeters, find its edge length.

10. (a) The bar graph below shows the number of books read by five students in a month. Answer the following questions based on the graph.

(i) Who read the maximum number of books? (ii) What is the difference between the number of books read by Rohan and Neha? (iii) Find the average number of books read by these students.

(b) If the simple interest on a sum of Rs. 2500 for 3 years at the rate of 5% per annum is Rs. 375, find the rate of interest.