SUMMATIVE ASSESSMENT – THIRD TERM

MATHEMATICS

Max. Marks: 60

Std - VII

Time: 2 Hrs

I. Choose the correct answer: **5 x 1 = 5**

1. 6.4 + 59.12 + 758.741 is equal to _____.
   a) 842.261 b) 824.261 c) 814.261 d) 834.261
2. 10 – 0.075 is equal to _____.
   a) 9.925 b) 9.25 c) 9.025 d) 10.025
3. 1.2 × 0.12 is equal to _____.
   a) 0.144 b) 1.440 c) 14.40 d) 1.044
4. 4 cm = _____ mm.
   a) 4 mm b) 14 mm c) 40 mm d) 400 mm
5. $a^2 + 2ab + b^2$ = _____.
   a) $a + b$ b) $a^2 + b$ c) $(a + b)^2$ d) $(a – b)^2$

II. Fill in the blanks with suitable answers: **5 x 1 = 5**

6. _____ is the middlemost position in the observation (Median / Mode)
7. The turtle is the cursor of the _____ language.
8. Always _____ is the first step in an algorithm.
9. A figure that is not symmetric is called an _____ figure.
10. 94 × 102 = _____.

III. Match the following: **5 x 1 = 5**

11. $\frac{1260}{420}$ - 3.26
12. 39.12 ÷ 12 - 9145.3
13. 7 × 0.9 - 6.3
14. 914.53 × 10 - 2400
15. $\frac{1680 \times 100}{70}$ - 3

IV. State whether the following statements are True or False: **5 x 1 = 5**

16. $\frac{1}{5}$ and 20% are equivalent fractions.
17. A ratio can also be expressed as a fraction.
18. $2\frac{4}{21} = \frac{46}{21}$

19. The Amount refers to the sum of the principal amount and the interest. (ie) A = P + I
20. If $x + y = 7$ and $x^2 + y^2 = 37$ then $xy = 6$.

V. Do as Directed: (Any 5) **5 x 2 = 10**

21. Ramy had ₹ 300.50 with her. She bought some pens for ₹ 82.00 and few pencils for ₹ 68.75. How much money is left with her?
22. Evaluate: 234.75 – (54.11 – 38.2) + 16.07
23. Express the following percentages as fractions.
    (i) $\frac{161}{4}$ % (ii) $33\frac{1}{3}$ %
24. Find the profit percent if the cost price of an air cooler is ₹ 6000 and the selling price is ₹ 7500.
25. Draw a flow chart to find the area of the square whose perimeter is given.
26. Find the mode for the data: 13, 15, 17, 14, 17, 17, 13, 13, 15. 16 and 17.
27. Define symmetry and asymmetry. Give one example to differentiate each.
28. Evaluate the following: $(x^2 + 10x + 25)(x^2 – 10x + 25)$

VI. Answer the following: (Any 5) **5 x 5 = 25**

29. If $a - \frac{1}{a} = 6$ find the value of $a + \frac{1}{a}$.
30. (i) Write an algorithm to find the perimeter of a rectangle. **(3marks)**
    (ii) Write the five basic symbols used in the flowchart. **(2marks)**
31. The sum of two numbers is 12 and the difference between their squares is 96. Find the two numbers.
32. Factorise the following:
    (i) $100a^2 – 140ab + 49b^2$
    (ii) $4a^2 – 12ab + 9b^2 – 16c^2$
33. A certain sum of money amounts to ₹ 7200 in 2 years and ₹ 7600 in 3 years. What would be the principal and the rate of interest?
34. Find the rate of interest if ₹ 3000 would yield ₹ 630 as simple interest in 3 years 6 months.
35. Fill in the blanks.
    (i) 0.11 × 0.111011 = _____.
    (ii) 6.14 × 2.86 = _____.
    (iii) 7 × _____ = 0.049
    (iv) 39.112 ÷ 0.39112 = _____.
    (v) 437.5 ÷ 1.25 = _____.

VII. Geometry: **1 x 5 = 5**

36. (a) Construct a triangle ABC where AB = 6 cm BC = 5 cm and AC = 9 cm

    (Or)

    (b) Draw equilateral triangle EFG with EF = 5.4 cm.