SUMMATIVE ASSESSMENT – THIRD TERM

MATHEMATICS

Max. Marks: 60

Std - VII

Time: 2 Hrs

Name of the School:	**Name of the Student:**
_____	_____
Place:	**Roll No.:**
_____	_____

I. Fill in the blanks: **5 × 1 = 5**

1. 8.03 + 8.033 + 8.3 = _____.
2. 91.453 × 1000 = _____.
3. 59.24 ÷ 10 _____.
4. The SP of a cap is ₹150. The gain is ₹25. The gain % is _____.
5. The additional money that the bank pays you is called _____.

II. Choose the correct answer: **5 × 1 = 5**

6. The solutions of the inequation $2 < K \leq 6$ are (where K is a natural number) _____.
   (a) 3, 4, 5 and 6 (b) 2, 3, 4 and 5 (c) 3, 4, and 5
7. The sum of 3 numbers is 12 and the sum another 2 numbers is 13. The mean of all the five numbers is _____.
   (a) 6 (b) 5 (c) 4 (d) 10
8. 2 is added to each of the numbers 5, 11 and 8. The average of the resulting number is ___.
   (a) 8 (b) 10 (c) 14 (d) 12
9. 146 days equal _____.
   (a) $\frac{1}{2}$ years (b) $\frac{2}{3}$ years (c) $\frac{2}{5}$ years
10. The CP is ₹450 and loss % is 10%. The SP is _____.
    (a) ₹400 (b) ₹350 (c) ₹405 (d) ₹415

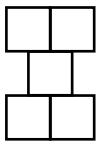
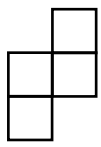
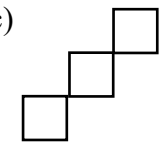
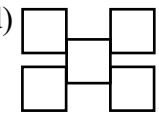
III. Match the following: **5 × 1 = 5**

11. Profit	–	$\frac{\text{sum of the observations}}{\text{number of observations}}$
12. $(a + b)^2$	–	$a^2 - b^2$
13. Simple interest	–	$a^2 + 2ab + b^2$
14. $(a + b)(a - b)$	–	$\frac{P \times R \times T}{100}$
15. Mean	–	SP – CP

IV. Write true or false: **5 × 1 = 5**

16. The total money received in the end, that is principal + interest is called the amount.
17. An expression that contains only one term is known as Binomial.
18. If $x - y = 4$ and $x^2 + y^2 = 136$ then $xy = 60$.
19. The turtle is the curser of the logo language.
20. Always "start" is the first step in an algorithm.

V. Answer the following questions (any 8): **8 × 3 = 24**

21. Find the difference 73.04 – 21.86.
22. Find the product 10.1001 × 10.01 correct to 3 decimal places.
23. ₹6000 is invested at the rate of 5% p.a. Calculate the interest and the amount receivable at the end of 3 years.
24. Evaluate using the above identity $(5x + 3y)^2$.
25. Round the following decimals to the nearest thousandth.
    (a) 0.39055 (b) 09.0499
26. Solve: $9x = 37^2 - 8^2$
27. Factorise the following algebraic expressions.
    (a) $16m^2 + 88m + 121$ (b) $9v^2 - 49w^2$
28. Which of the following figures has exactly one line of symmetry.
    (a)  (b)  (c)  (d) 
29. Find the mode of the data --- the marks obtained by 12 students of a class in a class test.

VI. Answer the following: (any 2) **2 × 5 = 10**

30. Julie had deposited a sum for 7 years at the rate of 6.5% and received ₹1,81,875 at the end of the deposit period. How much money would she have deposited initially?
31. Calculate the following using a suitable identity.
    (a) 503 × 507 (b) 94 × 102 (c) 3.2 × 2.7
32. Draw flow charts for the given algorithms
    (a) start
    (b) accept the area of the parellogram as AREA
    (c) accept the base of the parellogram as B
    (d) calculating the height using the formula H = AREA ÷ B
    (e) display the result H
    (f) stop

VII. Practical geometry: **1 × 6 = 6**

33. Construct triangle DEF where △ DEF = 60° FDE = 90° and the side DE = 6.5cm.

    (or)

    Construct triangle PQR where PQ = 6.4 cm, QR = 5 cm and △ PQR = 80°.