FORMATIVE ASSESSMENT – THIRD MID TERM

Max. Marks: 50

MATHEMATICS

Std - VII   **Time: 2 Hrs**

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

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

1. _____ is the observation which occurs most frequently in a set of given observations.

   a) Mean   b) Mode   c) Median

2. The mean of 5 numbers is 5.6 and the mean of 4 of these numbers is 5.5. The fifth number is_____.

   a) 6   b) 5.1   c) 5.8

3. 0.008% = _____

   a) $\dfrac{8}{100}$ b) $\dfrac{5}{50.0}$ c) $\dfrac{1}{125}$

4. 17 mm is _____ out of a centimeter.

   a) 170%   b) 1.7%   c) 0.17%

5. The C.P is ₹ 450 and the loss% is 10%. Then the S.P is _____

   a) ₹ 400   b) ₹ 350   c) ₹ 405

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

1. The additional money that the bank pays you is called _____

2. The formula for Simple Interest is _____

3. The sum of 3 numbers is 12 and the sum another 2 numbers is 13. The mean of all the five numbers is _____

4. 2 is added to each of the numbers 5, 11 and 8. The average of the resulting numbers is _____

5. A percentage is a fraction whose denominator is _____

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

1. 0.003 as a percentage is   -   146 days

2. 3% of 60 is   - $\dfrac{S.I \times 100}{P \times T}$

3. 2/5 of the year is equal to   - $\dfrac{loss}{C.P} \times 100$

4. Rate of interest   -   3

5. Loss%   - $\dfrac{9}{5}$

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IV. Write True of False: **5 x 1 = 5**

1. The sum of *n* observations = Median × *n*.

2. Data is a collection of numerical figures giving a particular type of information.

3. To find increase % we should divide by 100.

4. The cost of the fan ₹ 450 and the selling price is ₹ 405 then we can get profit.

5. Gain = S.P – C.P.

V. Do the following: (Any 10)   **10 x 2 = 20**

1. Find the mean of the numbers 4.4, 5.2, 7.1, 6.8, 4.8, 5.6 and 6.7.

2. Find the median of the first 11 composite numbers.

3. The mass 30 lemons are found in grams and noted. Find the mode of the data.

   33, 38, 38, 38, 41, 36, 33, 36, 38, 38, 41, 36, 38, 38, 36, 41, 36, 36, 38, 41, 36, 38, 43, 38, 36, 36, 38, 38, 43, 41.

4. The arithmetic mean of six numbers is 13. Five of these numbers are 7, 9, 11, 13, and 21. Find the sixth number.

5. Convert the fractions into percentages: a) $\dfrac{3}{50}$ b) $2\dfrac{4}{21}$

6. The mean of three numbers is 7. One of the numbers is 9. The mode is the same as the median. Find the other two numbers.

7. The cost of a book is ₹ 420. If it is to be sold at profit of 12% what would be its selling price?

8. ₹ 6000 is invested at the range of 5% p.a. Calculate the interest and the amount receivable at the end of 3 years.

9. The population of a village was 9850 in a certain year. It reduced to 9653 in the next year. Find the decrease % in the population.

10. a) 40 is 25% of which number?

    b) 6% of 1 hour is how much?

11. An alloy consists of 12% copper, 18% tin and the rest is brass. What fraction of the alloy is brass?

12. A gardener earns ₹ 2467.50 working for 21 hours in a month. What did he pay per hour?

VI. Do the following: (Any 2)   **2 x 5 = 10**

1. Prepare a frequency table for the data given below. Find the mode of the given data. The amount spent on food (in Rupees) of 25 houses of a certain locality for a month are given below:

   3500, 7000, 6000, 4000, 5500, 6000, 7500, 7500, 6000, 7000, 5500, 7000, 4500, 3500, 4000, 4000, 5000, 5500, 7000, 7500, 3500, 5500, 7000, 3500, 6000.

2. In how many years will ₹ 27000 earn an interest of ₹ 9450 at 7% interest p.a.?

3. A shop keeper purchased 15 boxes of pencils for ₹ 1200. Each box contained 12 pencils. By the end of the month, he was able to sell all the pencils. If he sold each pencil for ₹ 8, find his profit percent.