STEM SCHOOL
VIDYA NAGAR - GUNTUR
Affiliated to ICSE, New Delhi | Affiliation No : AP116

QUARTERLY EXAMINATION – 2024-2025
SUBJECT: MATHEMATICS
CLASS:VI

DATE: 23-09-2024 **TIME: $2\frac{1}{2}$ HOURS**

NAME OF THE STUDENT & SEC: _____ **MAX MARKS:80M**

- *Answers to this paper must be written on the paper separately.*
- *This paper is divided into two sections.*
- *Attempt all questions from section-Aand any four questions from section-B.*
- *The intended marks for questions or parts of questions are given in brackets [ ]*

SECTION-A[40M]

Attempt all questions from this section

QUESTION:1

Choose the correct answer for the following **15×1=15M**

1. What is the place value of 7 in the number 7,82,469 in the Indian System of Numeration?

   a) 7 b) 7,000 c) 7,00,000 d) 7,000,000

2. Which of the following numbers is correctly written in the International System of Numeration?

   a) 5,67,891 b) 5,678,91 c) 567,891 d) 5,67,8910

3. What is the sum of the face value and place value of 3 in the number 8,342?

   a) 30 b) 300 c) 303 d)330

4. Estimate the product of 576 × 43 to the nearest hundred.

   a) 25,000 b) 20,000 c) 24,000 d) 22,000

5. What is the value of the expression 10 + [8 ÷ 2 × (4 + 1)] – 3?

   a) 22 b) 27 c) 15 d) 13

6. What is the successor of the largest 3 – digit number?

   a) 1000 b) 999 c) 998 d) 1001

7. Which of the following is a property of whole numbers?

   a) Commutative property of multiplication b) Associative property of subtraction

   c) Distributive property of division d) Inverse property of addition

8. What is the pattern in the sequence 2, 4, 8, 16, …?

   a) Multiply by 2 b) Add 2 c) Subtract 2 d) Divide by 2

9. Which integer lies exactly in the middle of -5 and 5 on a number line?

   a) 1 b) 0 c) -1 d) -2

10. What is the absolute value of -8?

a) -8 b) 0 c) 8 d) -1

11. What is the result of adding -7 and 3?

a) -10 b) 4 c) -4 d) 10

12. Which of the following is a prime number?

a) 15 b) 21 c) 29 d) 35

13.What is the LCM of 12 and 18?

a) 36 b) 72 c) 24 d) 54

14. Which divisibility rule states that a number is divisible by 3 if the sum of its digit is divisible by 3?

a) Rule for 2 b) Rule for 4 c) Rule for 3 d) Rule for 5

15. Which method of set representation lists all the elements of a set inside curly brackets?

a) Description method b) Roster method c) Rule method d) Set – builder form

.**QUESTION:2**

a. Represent the integers -3, 0, -1 and 4 on a number line. [4M]

b. i. Arrange the following integers in ascending order: -5, 3, -1, 0, -4.

ii. Arrange the following integers in descending order: 2, 0, -3, 6, -5. [4M]

c. What is the absolute value of -12, 7, - (-9), -6. [4M]

QUESTION:3

a. List all the factors of 24. [4M]

b. Find the first four common multiples of 2 and 3. [4M]

c. Is 15 a prime number? Justify your answer. [5M]

SECTION :B [40M]

(Attempt any four questions from this section)

QUESTION:4

a. Apply the BODMAS rule to simplify the expression: $25+[12\div3\times(8-5)]$. [4M]

b. Determine the successor and predecessor of the following integers: [3M]

i. -78

ii. 0

c. Find the HCF of 18 and 24 using any method. [3M]

QUESTION:5

a. Add the integers: -7, 4, and -2. [3M]

b. Identify the letters from the words ‘I AM HAPPY’ which have no lines of symmetry. [3M]

c. Describe a singleton set and provide an example. [4M]

QUESTION : 6

a. Calculate the LCM of 15 and 20. [3M]

b. Write the additive inverse of the following integers: [3M]

i. -67

ii. – (-736)

c. Define a finite set and an infinite set with examples. [4M]

QUESTION: 7

a.

i. Compare the numbers 6,89,124 and 5,98,236. Which is greater?

ii. Find the difference between the place value and face value of 9 in 89,765. [5 M]

b. With the help of number line, evaluate the following: [5M]

i. 3 – 5 ii. (-2) - 7

QUESTION:8

a. Write the expanded form of the number 4,59,072 using the Indian System of Numeration. [3M]

b. Arrange the following integers in descending order: -3, 4, -1, 7, -6. [3M]

c. Draw the line(s) of symmetry of the letters of the word 'ARCHITECTURE' and write the alphabets of the given word which do not have any line of symmetry. [4M]

QUESTION: 9

a. Represent the set of even numbers less than 10 using the set builder method. [3M]

b.

i. Subtract: 12 from -8. [3M]

ii. What is the difference between the absolute values of -11 and 4?

c. What is the difference between an empty set and a finite set? Give examples. [4M]

QUESTION:10

a. Explain the associative property of multiplication with an example. [3M]

b. Estimate the difference between 1,234 and 678 to the nearest ten. [3M]

c.

i. Find all the prime factors of 84. [4M]

ii. What is the HCF of 24 and 36?

