BURARI PUBLIC SCHOOL

...a venture with UNIQUE

PERIODIC TEST - II (2026-27)

CLASS - VIII
SUBJECT - MATHEMATICS **Date_____**

M.M. = 40

Name: ……..…..…… Roll No:…… T. Sign: ……..……..…

General Instructions:

- All questions are compulsory.
- Handwriting should be neat and clean.
- This question paper is divided into four sections: A, B, C, and D.
- **Section A** – Q1 – Multiple choice questions (10 marks).
- **Section B** – Q2 – Q6 (2 Marks question each).
- **Section C** – Q7 – Q11 (3 Marks question each).
- **Section D** – Q12 – Case Based Question (5 marks).

Note: As per the guidelines of the New Education Policy (NEP), this holiday homework assessment will be conducted as an Open Book Assessment.
Students are encouraged to refer to their textbooks, notebooks, and other learning resources while completing the assignment. The focus of this assessment is on understanding, application, and expression of ideas rather than rote learning. Students are advised to maintain honesty and originality in their work.

SECTION – A

Q1. Multiple choice questions: **(1× 10 = 10 marks)**

I. Which of these can be expressed as the sum of first 9 odd natural numbers?

a) 4^2 c) 8^2

b) 9^2 d) 14^2

II. If one side of a cube is 11 cm, the volume of cube is:

a) 1000 c) 1331

b) 1512 d) 1729

III. Two adjacent angles of a parallelogram are $(3x + 20)^0$ and $(2x – 10)^0$. The value of x is:

a) 34 c) 30

b) 40 d) 26

IV. Which of the following can be four interior angles of a quadrilateral?

a) $140^0, 40^0, 20^0, 180^0$ c) $240^0, 40^0, 20^0, 150^0$

b) $40^0, 70^0, 90^0, 60^0$ d) $110^0, 40^0, 30^0, 180^0$

V. $\sqrt[3]{64} + \sqrt[3]{27} + \sqrt[3]{125}$

a) 21 c) 12

b) 9 d) 6

VI. 52840000 in standard form is:

a) 0.5284×10^7 c) 5.284×10^7

b) 52.84×10^7 d) 5.284×10^4

VII. $(1^0 \times 2^0 \times 3^0 \times 0)$ is equal to

a) 5 c) 3

b) 3 d) 0

VIII. For which of the following figures, diagonals are perpendicular to each other?

a) Parallelogram c) Kite

b) Trapezium d) Rectangle

IX. **Assertion (A):** $(-2)^{99} = 2^{99}$

Reason (R): $(-1)^{\text{odd number}} = -1$

Study both the statements and state which of the following is correct:

(a)Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true and R is not the correct explanation of A.

(c) A is true, but R is false.

(d) A is false, but R is true.

X. **Assertion (A):** The sum of the measures of all the angles of a kite is 360^0.

Reason (R): A kite is a quadrilateral.

Study both the statements and state which of the following is correct:

(a)Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true and R is not the correct explanation of A.

(c) A is true, but R is false.

(d) A is false, but R is true.

SECTION – B

❖ **2 Marks question each** **(2×5=10 marks)**

Q2. Write the roman numeral for each of the following:

a) 347
b) 85
c) 468
d) 140

Q3. Find the cube root of 74088 using prime factorisation method.

Q4. Simplify and write the answer in exponential form:

$$3^2 \times 3^{-5} \times 3^6$$

Q5. If the length of the diagonals of the rectangle are (4x +1) cm and (2x+15) cm. Find the actual length of diagonals of rectangle.

Q6. Give the answer for each of the following in roman numerals:

a) XCV – LXXV
b) XLIV + XX

SECTION – C

❖ **3 Marks question each** **(3×5=15 marks)**

Q7. Two adjacent angles of a parallelogram are $(3x - 4)^0$ and $(3x + 16)^0$. Find the angles of the parallelogram.

Q8. Simplify:

$$\frac{2^3 \times 7^2 \times 13^8}{56 \times 13^7}$$

Q9. Find the least number by which 1875 must be divided to make it a perfect square. Also find the square root of the perfect square so obtained.

Q10. Three angles of a quadrilateral are equal to 100^0, 60^0 and 80^0. Find its fourth angle.

Q11. The students of class VIII of a school donated ₹2601 for National Relief Fund. If each student donated as much money as the number of students, find the number of students in the class.

SECTION – D

Q12. Case Based Question **(5 marks)**

Secret Code Message

A secret code uses Roman numerals:

A = I, B = II, C = III, …

A message is written as:

XXV – V – XIX

Based on the above information, answer the following:

i. Convert each Roman numeral into numbers.
ii. Decode the message using the given pattern.
iii. Write your name in the same coding system.
iv. What will be the code for the word “MATH”?
v. Explain one limitation of this coding method.