



Class: IX

Time Allowed: 20 minutes

Q1:

MODEL PAPER EXAMINATION 2026

SUBJECT: MATHEMATICS

(SECTION "A")

Marks: 15

Note: Attempt **ALL** questions from section 'A'. Each question carries **ONE** mark.1 The solution set of the line $x=2$ and $x=5$ is:

A. $\{(2,5)\}$ B. $\{2,5\}$ C. $\{(0,5)\}$ D. $\{\}$

2 If perpendicular distance between two lines is the same, the lines are _____ to each other.

A. Perpendicular B. Parallel C. Intersecting D. None

3 In $2i(3-1)$, the real part is:

A. -1 B. 2 C. -2 D. +1

4 If $\log_{10} x=2$, then $x=$ _____

A. 200 B. 10000 C. 1000 D. 100

5 If $x + y = 10$ and $x - y = 6$, then $\frac{x}{y} =$ _____

A. 4 B. 8 C. 2 D. 1

6 The additive inverse of $\sqrt{5}$ is:

A. $-\sqrt{5}$ B. $\frac{1}{\sqrt{5}}$ C. -5 D. 5

7 The scientific notation of 0.05076 is:

A. 50.76×10^2 B. 50.76×10^{-2} C. 5.076×10^{-2} D. 5.076×10^2

8 $x^2 - 15x + 56 =$

A. $(x-7)(x+8)$ B. $(x+7)(x-8)$ C. $(x-7)(x-8)$ D. $(x+7)(x+8)$

9 In $(5, -1)$, x co-ordinate is _____.

A. 5 B. 1 C. -1 D. -5

10 Degree of quadratic equation is _____

A. 1 B. 2 C. 3 D. 4

11 In a right-angled triangle, the line opposite to the right angle is called _____.

A. Base B. Perpendicular C. Parallel D. Hypotenuse

12 $\sqrt{7}$ is an example of _____.

A. Trinomial Surd B. Binomial Surd C. Monomial Surd D. Conjugate Surd

13 In $x \geq 4$, x is _____ 4

A. Greater than B. Equal to C. Less than D. Greater than or equal to

14 The sum of all angles of a triangle is _____.

A. 90° B. 180° C. 270° D. 360°

15 The medians of a triangle are _____

A. Concurrent B. Collinear C. Congruent D. Parallel

**Class: IX****MODEL PAPER EXAMINATION 2026**
Time: 2 hours 40 minutes **SUBJECT: MATHEMATICS (SECTION "B" AND SECTION "C")** **Total Marks 60** **SECTION "B" (SHORT ANSWER QUESTIONS)** **Total Marks 30 Marks**
Q2: Answer any **SIX** questions from this section.

- i. Simplify: $\frac{\sqrt[3]{(125)^2 \times 8}}{\sqrt{(2 \times 32)^2}}$
- ii. Find the value of K, if the polynomial $x^3 + Kx^2 + 3x - 4$ leaves a remainder “-2” when divided by $(x + 2)$
- iii. Factorise: $(x^2 + 5x + 4)(x^2 + 5x + 6) - 120$
- iv. Solve by using logarithm: $\frac{(2391 \times 30.72)}{23.34}$
- v. Find the factors by using factor theorem : x^3+x^2-x-1
- vi. Simplify: $\frac{2}{x+2} - \frac{x-4}{2x^2+x-6}$
- vii. If two opposite sides of a quadrilateral are congruent and parallel, prove that it is a parallelogram.
- viii. Find the solution set of $|5x - 3| - 2 = 3$
- ix. Show that A (3,4), B (1,2) and C (0,4) form a scalene triangle.
- x. Find the solution set $|2x + 3| < x + 2, \forall y \in N$ and represent number line.
- xi. Solve the quadratic equation $2x^2 + 8x - 1 = 0$ by completing square method.
- xii. If $z_1 = -4 + 6i$ and $z_2 = 2\frac{1}{2} - 2i$, verify that $\overline{z_1 - z_2} = \overline{z_1} - \overline{z_2}$
- xiii. Construct a ΔSTU in which $m < T = 60^\circ$, $m < U = 30^\circ$ and $m\overline{TU} = 7\text{cm}$.

SECTION "C" (DETAILED ANSWER QUESTIONS)**30 Marks****Q3:** Attempt any **THREE (3)** Questions. from this section.

- i. Factorize any two:
 - a) $x^2 + 2xy + y^2) - 9z^4$
 - b) $a^8 + a^4 + 1$
 - c) $a^6 + 1$
 - d) $3x^2 - 38xy - 13y^2$
- ii. Solve by graphical method: $3x + 2 = 5y$, $3x + 5y = 8$
- iii. Show that $A(2,1), B(5,1)$ and $C(2,6)$ are the vertices of a right-angled triangle.
- iv. Using distance formula, find the perimeter of the triangle formed by the points $A(0,0), B(4,0)$ and $C(2,2\sqrt{3})$.
- v. The line segment joining the mid-points of two sides of a triangle, is parallel to the third side and it is equal to one half of its length. Prove it

END OF PAPER