

Time allowed: 3 Hrs

Mathematics (9th)
Fresh / Reappear

Marks: 75

Note: There are three sections of the paper, A, B & C. Carefully read the instructions for each section and attempt accordingly. Attempt all questions of section - (A) and return it to the superintendent within the given time

Time: 20 mins

Section "A"

Marks: 15

Q.1 Write the correct option i.e. A, B, C or D in the empty box provided opposite each part.

i. $(a - b)^2 =$ _____

- A. $a^2 - b^2$ B. $a^2 - ab + b^2$ C. $a^2 - 2ab + b^2$ D. $a^2 + 2ab + b^2$

ii. Conjugate of $5 - 2\sqrt{6}$ is _____

- A. $-5 - 2\sqrt{6}$ B. $-5 + 2\sqrt{6}$ C. $\frac{1}{5 + 2\sqrt{6}}$ D. $5 + 2\sqrt{6}$

iii. L.C.M. of $(a - b)^4$ and $(a - b)^2$ is _____

- A. $(a - b)$ B. $(a - b)^3$ C. $(a - b)^4$ D. $(a - b)^7$

iv. The value of $3b + 5c$, when $b = -4$, $c = 3$ is _____

- A. -27 B. 3 C. -12 D. 15

v. The solution set of $\sqrt{x} = -10$ is _____

- A. {100} B. {10} C. {-10} D. { }

vi. The two coordinate axes intersect at an angle of _____

- A. 30° B. 45° C. 60° D. 90°

vii. $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$ is called _____

- A. Mid point formula B. Distance formula C. Ratio formula D. Division formula

viii. How many acute angles are there in an acute angled triangle?

- A. 1 B. 2 C. 3 D. vary from triangle to triangle

ix. If sum of the measures of $\angle A$ and $\angle C$ of a parallelogram ABCD is 130° , then $\angle B =$ _____

- A. 25° B. 65° C. 50° D. Greater than 90°

x. Perimeter of a rectangle is 22cm, length of its diagonal is _____ 11cm

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

xi. If A is a square matrix and $A^T = A$, then A is _____

- A. Skew-symmetric matrix B. Symmetric matrix C. Diagonal matrix D. Scalar matrix

xii. The simplified form of $\frac{3^3}{3^7}$ is _____

- A. 3^7 B. 3^{10} C. 3^3 D. 3^{-7}

xiii. $\sqrt{-1} \times \sqrt{-1} =$ _____

- A. 1 B. -1 C. i D. 0

xiv. The standard form of 892×10^{-9} is _____

- A. 0.0000892 B. 0.000892 C. 892000 D. 8920000

xv. Characteristic of $\log(23.557)$ is _____

- A. 2 B. 3 C. 0 D. 1