

Math (Science)

Group-II

Paper-I

Time: 20 Minutes

(Objective Type)

Max Marks: 15

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

- 1-1- $x = 0$ is a solution of the inequality _____.
- (a) $3x + 5 < 0$ (b) $x > 0$
 (c) $x + 2 < 0$ (d) $x - 2 < 0$ ✓
- 2- Mid-point of the points $(2, -2)$ and $(-2, 2)$ is:
- (a) $(2, 2)$ (b) $(-2, -2)$
 (c) $(0, 0)$ ✓ (d) $(1, 1)$
- 3- A line segment has _____ end points.
- (a) 2 ✓ (b) 3
 (c) 4 (d) 5
- 4- The square root of $a^2 - 2a + 1$ is _____.
- (a) $\pm(a + 1)$ (b) $\pm(a - 1)$ ✓
 (c) $a - 1$ (d) $a + 1$
- 5- Write $\sqrt[7]{x}$ in exponential form:
- (a) x (b) $x^{7/2}$
 (c) x^7 (d) $x^{1/7}$ ✓
- 6- The degree of polynomial $4x^4 + 2x^2y$ is _____.
- (a) 1 (b) 2
 (c) 3 (d) 4 ✓
- 7- Bisection means to divide into _____ equal parts.
- (a) 2 ✓ (b) 3
 (c) 4 (d) 5
- 8- A diagonal of parallelogram divides it into _____ congruent triangles.
- (a) 3 (b) 2 ✓
 (c) 4 (d) 5

- 9- If $\begin{vmatrix} 2 & 6 \\ 3 & x \end{vmatrix} = 0$, then 'x' is equal to:
- (a) 9 ✓ (b) -6
(c) 6 (d) -9
- 10- If $(x - y, y + 1) = (0, 0)$, then (x, y) is:
- (a) (-1, 1) (b) (1, 1)
(c) (1, -1) ✓ (d) (-1, -1)
- 11- The symbol used for similarity is _____.
- (a) \cong (b) \perp
(c) \leftrightarrow (d) \sim ✓
- 12- In a parallelogram, opposite angles are _____.
- (a) Parallel (b) Congruent ✓
(c) Concurrent (d) Perpendicular
- 13- A triangle having two sides congruent is called _____.
- (a) Scalene (b) Right angled
(c) Isosceles ✓ (d) Equilateral
- 14- The factors of $x^2 - 5x + 6$ are _____.
- (a) $x + 1, x - 6$ (b) $x - 2, x - 3$ ✓
(c) $x + 6, x - 1$ (d) $x + 2, x + 3$
- 15- The relation $y = \log_z x$ implies _____.
- (a) $z^y = x$ ✓ (b) $y^z = x$
(c) $x^z = y$ (d) $x^y = z$