9181 7416

MATHEMATICS — 9th

NOTE: Attempt all questions of Section A by filling the corresponding bubble on the MCQ ANSWER SHEET and return it to the Superintendent within given time, even if you have not attempted any question.

SECTION-A

Time: 20 Minutes Marks: 15

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1. The matrix $\begin{bmatrix} -1 & 0 \\ 0 & -2 \end{bmatrix}$ is ..... matrix. A) diagonal, B) scalar, C) identity, D) null

2. If A is a square matrix then $A = A^t$ is called ..... matrix. A) skew symmetric, B) symmetric, C) diagonal, D) identity

3. If $2(3+4) = 2\cdot3 + 2\cdot4$ then the property used is ..... A) commutative, B) associative, C) distributive, D) closure

4. If $\log x = 3$ then x = ... A) 200, B) 1000, C) 100, D) $\frac{2}{10}$

5. $(a+b)^2 - (a-b)^2$ = ... A) 4ab, B) $2(a^2+b^2)$, C) $a^2 - 4ab + 2b^2$, D) $2a+2b$

6. In simplified form $\frac{1}{a+b} + \frac{b}{a^2-b^2}$ = ... A) $\frac{b+1}{a^2-b^2}$, B) $\frac{a}{a^2-b^2}$, C) $\frac{b}{a^2-b^2}$, D) $\frac{b+a}{a^2-b^2}$

7. LCM = ... A) $\frac{HCF}{A \times B}$, B) $\frac{A \times B}{HCF}$, C) $\frac{A}{HCF}$, D) $\frac{B}{HCF}$

8. The solution set of $5 - 3x = -4$ = ... A) $\{-3\}$, B) $\{1,3\}$, C) $\{3\}$, D) $\{9\}$

9. The two coordinate axes intersect at an angle of ..... A) 30°, B) 60°, C) 90°, D) 45°

10. Let $p_1(2,0)$ and $p_2(0,2)$ are any two points in a plane then $|p_1p_2|$ = ...
A) 4, B) $\sqrt{2}$, C) $2\sqrt{2}$, D) 0

11. How many obtuse angles can be there in a triangle? A) at least 1, B) at the most 1, C) two, D) vary from triangle to triangle

12. Perpendicular bisectors of a triangle are ..... A) congruent, B) concurrent, C) parallel to each other, D) none of these

13. Diagonal of a rectangle measures 6.5cm. If width is 2.5cm, its length is .....
A) 4 cm, B) 9 cm, C) 6 cm, D) 3 cm

14. Perpendicular from a vertex of a triangle to its opposite side is called .....
A) median, B) perpendicular bisector, C) altitude, D) angle bisector

15. The point of intersection of the ..... of a triangle divides them in the ratio 2:1
A) angle bisectors, B) perpendicular bisectors, C) medians, D) altitudes