MATHEMATICS 10 Class 2018

Time: 30 minutes **Max. Marks: 20**

SECTION "A" (MULTIPLE CHOICE QUESTIONS)

Q.1. Choose the correct answer for each from the given options:

1. (-6, 4) is in quadrant:
   • 1st • 2nd • 3rd • 4th
2. The sum of two complementary angles is:
   • 90° • 180° • 360° • 100°
3. The distance of any point of a circle from its centre is called its:
   • Radius • Diameter • Chord • Tangent
4. The characteristic of log 0.00226 is:
   • $\bar{3}$ • $\bar{2}$ • 3 • 2
5. If a + b = 2 and a – b = 2 then the value of $a^2 - b^2$ is:
   • 8 • 6 • 4 • None of these
6. If a : b :: b : c then b is called:
   • 1st proportion • Mean proportion
   • 4th proportion • None of these
7. The additive inverse of matrix $\begin{bmatrix} -2 & 4 \\ 3 & -6 \end{bmatrix}$ is:
   • $\begin{bmatrix} -2 & 4 \\ -3 & 6 \end{bmatrix}$ • $\begin{bmatrix} 2 & -4 \\ -3 & 6 \end{bmatrix}$ • $\begin{bmatrix} -2 & 4 \\ 3 & -6 \end{bmatrix}$ • $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$
8. $8^{1/3} \times 36^{1/2} =$
   • 48 • 12 • 16 • None of these
9. tan 60° =
   • $1/\sqrt{3}$ • $\sqrt{3}$ • 1 • None of these
10. If $\log_x 81 = 4$ then 'x' =
    • 3 • 4 • 16 • 9
11. If the standard deviation of a series is 4, then its variance is:
    • 20 • 36 • 2 • 16
12. $1 + \tan^2\theta =$
    • $\sec^2\theta$ • $\text{Cosec}^2\theta$ • $\sin^2\theta$ • None of these
13. If $\sqrt[n]{x} = y$, then the value of radicand 'x' is:
    • $(x)^n$ • $(y)^n$ • $(n)^n$ • $(y)^2$
14. The sum of angles of a Parallelogram is:
    • 180° • 240° • 320° • 360°
15. The I.C.M of 9x2 and 15 x is:
    • $24x^2$ • $45x^2$ • $135x^3$ • $135x^2$
16. If the determinant of matrix is zero, the matrix is called a/an:
    • Identity matrix • Null matrix
    • Singular matrix • Non-singular matrix
17. The degree of given polynomial $\sqrt[3]{(a^2-b)^3}$ is:
    • 1 • 3 • 2 • 5
18. The solution set of $|y - 3| = -4$ is:
    • {-1 , 2} • {-2 , -2} • { } • (1 , 3}
19. $\sqrt{1 - \sin^2\theta} =$
    • $\cos\theta$ • $\tan\theta$ • $\sec\theta$ • $\sin\theta$
20. The square root of $(a - b)^2$ is:
    • $\pm(a - b)$ • $(a - b)(a - b)$ • $\pm(a + b)$ • None of these