

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

- 1- 1- a, b and c are in A.P., then
 (A) $2a = b - c$ (B) $2b = a + c$ (C) $2b = a - c$ (D) $2a = b + c$
- 2- Number of terms in expansion of $(1 + x)^{n-1}$ is
 (A) $n + 2$ (B) $n + 1$ (C) n (D) $n - 1$
- 3- H is Harmonic mean between a and b then $H =$ _____
 (A) $\frac{2ab}{a+b}$ (B) $\frac{a+b}{2ab}$ (C) $\frac{2ab}{a-b}$ (D) $\frac{a-b}{2ab}$
- 4- $\cos(\tan^{-1}0) =$ _____
 (A) 0 (B) 1 (C) -1 (D) ∞
- 5- In $\frac{p(x)}{q(x)}$, degree of p(x) is less than degree of q(x), then fraction is
 (A) proper (B) improper (C) combined (D) partial
- 6- Set having no proper subset
 (A) $\{ \}$ (B) $\{ 1 \}$ (C) $\{ 1, 2 \}$ (D) $\{ 1, 2, 3 \}$
- 7- Recurring decimal is a _____ number.
 (A) prime (B) rational (C) irrational (D) integer
- 8- Sum of roots of equation $x^2 - 5x + 6 = 0$
 (A) 6 (B) -6 (C) 5 (D) -5
- 9- ${}^nC_8 = {}^nC_{12}$, then value of n is
 (A) 8 (B) 12 (C) 16 (D) 20
- 10- Proposition _____ is called biconditional
 (A) $p \rightarrow q$ (B) $p \leftrightarrow q$ (C) $p \wedge q$ (D) $p \vee q$
- 11- $\sin x = \frac{1}{2}$, then $x =$ _____
 (A) $\frac{\pi}{6}$ (B) $\frac{\pi}{4}$ (C) $\frac{\pi}{3}$ (D) $\frac{\pi}{2}$
- 12- Number of radians in semi-circle
 (A) $\frac{\pi}{2}$ (B) π (C) 2π (D) $\frac{2\pi}{3}$
- 13- $3^{2x} + 4 \cdot 3^x + 4 = 0$ is _____ equation.
 (A) cubic (B) radical (C) reciprocal (D) exponential
- 14- Period of $\tan x$ is
 (A) $\frac{\pi}{2}$ (B) 3π (C) 2π (D) π
- 15- $(-1)^{-\frac{21}{2}} = \dots\dots$
 (A) 1 (B) -1 (C) i (D) -i
- 16- If $\begin{bmatrix} x & 1 \\ 3 & 1 \end{bmatrix}$ is singular, then $x =$ _____
 (A) -3 (B) 3 (C) 1 (D) -1
- 17- Sum of opposite angles of cyclic quadrilateral is
 (A) 90 (B) 120 (C) 180 (D) 270
- 18- The matrix $\begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ is _____ matrix.
 (A) square (B) unit (C) null (D) row
- 19- Co-ratio of Cosine is
 (A) sine (B) cosine (C) tangent (D) secant
- 20- If $A = \{1, 2, 3\}$ and $B = \{4, 5\}$, which is not element of $A \times B$
 (A) (1, 4) (B) (2, 4) (C) (3, 4) (D) (4, 3)