

Mathematics General Science Test Medium Mode

| Sr | Questions | Answers Choice |
|----|---|--|
| 1 | Question Image | D. none of these |
| 2 | If the 4th term in the expansion of $(px + x^{-1})^m$ is 2.5 for all $x \in R$, then | |
| 3 | The area enclosed between the graph $y = x^2 - 4x$ and the x- axis is: | A. 20/3 B. 41/3 C. 32/3 D. 25/3 |
| 4 | $(a,0) \times (c, 0) =$ | A. (0,ac) B. (ac, 0) C. (0,0) D. (a, c) |
| 5 | $60^\circ =$ _____ | |
| 6 | Question Image | |
| 7 | Question Image | A. A B. A' C. U D. None of these |
| 8 | If $P = \{x/x = p/q \text{ where } p,q \in \mathbb{Z} \text{ and } q \neq 0\}$, then P is the set of | A. Irrational numbers B. Even numbers C. Rational numbers D. Whole numbers |
| 9 | The matrix $A = [a_{ij}]_{m \times n}$ with $m \neq n$ is | A. Rectangular B. Symmetric C. Square D. None |
| 10 | A circle which touches one side of a triangle externally and the other two sides produced is called _____ | A. In-circle B. Circum circle C. Escribed circle D. None of these |
| 11 | If $\sin(\pi \cos \theta) = \cos(\pi \sin \theta)$, then which of the following is correct? | |
| 12 | Question Image | A. $3x^2 + 2$ B. $3x^2 + 2x + 3$ C. $x^3 + x^2$ D. none of these |
| 13 | Question Image | A. 0 B. 1 D. -1 |
| 14 | Roots of the equation $x^2 + 7x + 12 = 0$ are | A. {3, -4} B. {-3, 4} C. {3, 4} D. {-3, -4} |
| 15 | The multiplicative inverse of (a,b) is | |
| 16 | If $A = [a_{ij}]_{m \times p}$ and $B = [a_{ij}]_{p \times n}$ then order of BA is | A. $m \times n$ B. $p \times n$ C. $n \times m$ D. None of these |
| 17 | Question Image | |
| 18 | If $a_n = 2n - 3$, write the first four terms | A. -3, -1, 1, 3 B. 1, 3, 5, 7 C. -1, 1, 3, 5 D. None of these |
| 19 | A farmer possesses 100 hectometers of land and wants to grow corn and wheat. Cultivations of corn requires 3 hours per hectometer while cultivation of wheat requires 2 hours per hectometer. Working hours cannot exceed 240. If he gets a profit of Rs. 20 per hectometer for corn and Rs. 15 per hectometer for wheat. The profit function for the farmer is | A. $P(x, y) = 20x + 15y$ B. $P(x, y) = 2x + 3y$ C. $P(x, y) = x + y$ D. $P(x, y) = 3x + 2y$ |

A fraction in which the degree of the numerator is less than the degree of the denominator is called

- A. Polynomial
- B. Equation
- C. Proper fraction
- D. Improper fraction