Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	D. all are correct
2	$x^4 - 3x^3 + 3x + 1 = 0$ is called _____	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
3	Question Image	A. Symmetric B. Skew-symmetric C. Hermitian D. Skew hermitian
4	A point of a solution regions where two of its boundary lines intersect, is called:	A. Vertex of the solution B. Feasible point C. Point of inequality D. Null point of the solution region
5	Cofactor of an element aij denoted by Aij is	A. $(-2)i+j$ B. Mij C. $(-1)^{i+j}$ Mij D. None of above
6	Question Image	B. $x^{-2} + c$ D. not possible
7	Unit vector in the positive direction of x-axis is	
8	Question Image	A. A B. B C. U D. None of these
9	The second degree equation $2x^2 - xy + 5x - 2y + 2 = 0$ represents	A. Circle B. Hyperbola C. Ellipse D. Pair of straight lines
10	The set $\{Z\backslash\{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
11	The set $\{1,-1,i,-i\}$	A. Form a group w.r.t addition B. Form a group w.r.t multiplication C. Does not form a group w.r.t multiplication D. Not closed under multiplication
12	The period of cot 8x is	A. $\pi/10$ B. $9\pi/7$ C. $\pi/9$ D. $\pi/8$
13	Which of the following is not a unit vector	A. [1, 1, 1] B. [0, 1, 0] C. [0, 0, 1] D. [1, 0, 0]
14	Question Image	A. Improper rational fraction B. Proper rational fraction C. Polynomial D. Equation
15	Multiplicative inverse of "1" is	A. 0 B. ± 1 C. 1 D. $\{0,1\}$
16	Question Image	A. A B. -A C. A^t D. A^{-}
17	Question Image	D. None of these

18	An observer on the top of a cliff 200 m above the sea level, observes the angles of depression of two ships on opposite sides of the cliff to be 45° and 30°, respectively. The distance between the ships if the line joining them points to the base of cliff is
19	Question Image
20	Question Image