Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The matrix A is Hermitian when (A)' =	A. A B. -A C. A D. A'
2	The line through the intersection of the lines x+ 2y+ 3= 0 : 3x +4y +7 =0 and making equal intercepts on the axes is	A. x+ y+ 1= 0 B. x+ y- 2= 0 C. x+ y+ 2= 0 D. 2x +y +2 =0
3	The feasible region which can be enclosed within a circle is called	A. Bounded region B. Convex region C. Unbounded region D. None
4	Point (2,0) lies on trigonometric function f(x)=_____;	A. sinx B. cosx C. tanx D. secx
5	Question Image	B. 1 C. -1
6	If order of A is m x n, then order of A^t is	A. m x m B. n x n C. m x n D. n x m
7	Two matrices A and B are conformable for the product AB if	A. Both A and B are square B. Both A and B are symmetric C. Number of rows of A = number of columns of B D. Number of columns of A = number of rows of B
8	Question Image	D. none of these
9	The middle term in the expansion of $(a +x)^{12}$ is	A. 7th B. 8th C. 9th D. 6th
10	Question Image	
11	The angle of depression of a point situated at a distance of 70 meters from the base of a tower is 45°. The height of the tower is	A. 70 m B. 85 m C. 35 m D. None of these
12	Question Image	A. A⁻ B. A^t C. -A D. A
13	Question Image	A. 0 B. -1 C. 1 D. 2
14	If $\underline{u} = 2\underline{i} + p\underline{i} + 5\underline{k}$ and $\underline{v} = 3\underline{i} + \underline{i} + p\underline{k}$ are perpendicular , then p=	A. 1 B. 2 C. -1 D. -3
15	A stationary point x is a relative exterma of y= f(x) is	A. f'' (x) > 0 B. f'' (x) < 0 C. f'' (x) ≠ 0 D. f''(x) = 0
16	A quadratic equation has two	A. roots B. degree C. variables D. constants

17	If a > 0 they parabola y2 =-4ax lies in	A. I and IV quadrant B. I quadrant C. II and III quadrant D. All are incorrect
18	Power set of X i.e P(X).....under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
19	Question Image	
20	sin $(\alpha+\beta)=$	A. sinαcosβ- cosαsinβ B. sinαcosβ- cosαsinβ C. sinαcosα- cosβsinβ D. sinαcosα+ cosβsinβ