Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. A B. -A C. A^t D. A⁻
2	If a,βare the roots of the equation x2 - 8x + p = 0 and a2 + β2= 40,then value of p is	A. 8 B. 12 C. 10 D. 14
3	$\sin^{-1} x =$	A. tan⁻¹ x B. Cosec⁻¹ x C. Cosec x D. cosec⁻¹(1/x)
4	If one root of the equation x^2- 3x + a = 0 is 2 then a = _____	A. 0 B. 1 C. 2 D. 3
5	If θ be angle between u,v and u,v determine the sides of a triangle then the third side opposite to angle θ has length	A. |u+v| B. |u|+|v| C. |u-v| D. |u|-|v|
6	The vector k = [0,0,1] is called unit vector along:	A. x -axis B. y - axis C. z- axis D. None of these
7	A circle drawn inside a triangle and touching its sides is called _____;	A. Circumcirle B. Incircle C. Escribed circle D. unit circle
8	Question Image	
9	The number of terms in the expansion of $(a + x)^{12}$is	A. 13 B. 12 C. 11 D. 10
10	Question Image	
11	Question Image	
12	The circle $(x - 2)^2$+ $(y + 3)^2$= 4 is not concentric with the circle	A. (x - 2)²+ (y + 3) ²= 9 B. (x + 2)²+ (y - 3) ²= 4 C. (x + 2)²+ (y - 3) ²= 8 D. (x - 2)²+ (y + 3) ²= 5
13	If n is any positive integer then n^2> n + 3 for	
14	The liner equation ax + by = c is called _____ of the inequality ax +by > c.	A. Associated equation B. Non-associated equation C. disjoint equation D. Feasible equation
15	The equation of a line parallel to the tangent to the circle x^2+ y^2= 16 at the point (2, 3) and passing thro' the origin is	A. 2x + 3y = 0 B. 2x - 3y = 0 C. 3x + 2y = 0 D. 3x - 2y = 0
16	4^{1+x}+ 4^{1-x}= 10 is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
17	How many term are there in the A.P, in which a_1 = 11 , a_n =68, d=3	A. 30 B. 27

		C. 20 D. 21
18	The number of non zero rows in echelon form of a matrix is called	A. Order of matrix B. Rank of matrix C. Row operation D. None of these
19	Question Image	
20	A joint equation of the lines through the origin and perpendicular to the lines ax2 +2hxy +by2 =0 is indentical is ax2 +2hxy +by2 =0 if	A. h2 = ab B. a + b =0 C. a = b D. a≠ b E. a = b = 0