Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	f (x) = | x | is a/an	A. Injective function B. Bijective function C. Surjective function D. Implicit function
2	The set which has no proper subset is	A. {0} B. {} C. {∅} D. None of these
3	One minute is denoted by	A. 1⁰ B. 1' C. 1" D. None of these
4	If a_1= 3, r = 2, then the nth term of the G.P. is	A. 2.3ⁿ⁻¹ B. 3.2ⁿ C. 3.2ⁿ⁺¹ D. 3.2ⁿ⁻¹
5	The equation of the sphere thro' the origin and making intercepts a, b, c on co-ordinate axes is	A. x²+ y²+ z²+ ax + by + cz = 0 B. x²+ y²+ z²- 2ax - 2 by - 2 cz = 0 C. x²+ y²+ z²= a + b + c D. x²+ y²+ z²- ax - by - cz =0
6	The obtuse angle between lines = -2 and y = x +2 is	A. 120° B. 135° C. 150° D. 140°
7	Question Image	
8	The vertex of the standard position angles lies on	A. (0,0) B. (0,1) C. (1,0) D. (1,1)
9	Rank of matrix [1 3 5 0] is	A. 1 B. 3 C. 2 D. 4
10	A - B = _____	
11	The direction cosines of a line equally inclined with co-ordinate axes are	
12	IfΔABC is right, law of cosine reduce to	A. Law of sine B. Law of tangent C. Phthogorous theorem D. Hero's formula
13	A statement which is either true or false is called	A. Induction B. Deduction C. Propositicon D. Logic
14	The coefficient of x^{18} in $(ax^4-bx)^9$ after expansion is	A. 84a³ b⁶ B. 22a³b⁶ C. 27a⁴b⁵ D. 28a³b⁶
15	A box containing 10 mangoes out of which 4 are rotter. Two mangoes are taken together from the box. If one of them is found to be good, the probability that the other is also good is	A. 1 / 3 B. 8 / 15 C. 5 / 13 D. 5 / 9
16	$\tan\theta/2$	
17	Question Image	

18	The area under the curve $y = 1/x^2$ between x = 1 and x =4 is:	A. -25 B. 0.75 C. -0.35 D. -10
19	$\cot\theta = \sin 2\theta$ if θ =	
20	4/√49 is a	A. Irrational Number B. Prime Number C. Rational number D. Whole number