Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
2	1/2,1/3,1/4,1/5.....is	A. a geometric sec B. an arithmetric series C. finite sequence D. an infinite sequece
3	The angle between the vectors u =2i - i + k and v = -i + i is:	A. 3π/2 B. 2π/3 C. 5π/6 D. π/3
4	Which of the following is a vector	A. length B. momentum C. volume D. speed
5	If |a x b|2 + (a,b)2 = _____	A. |a|2 + |b|2 B. |a|2- |b|2 C. |a|2|b|2 D. None
6	If A and B are two sets then intersection of A and B is denoted by	
7	Question Image	A. direction ratios B. direction cosines C. direction angles D. none of these
8	Sand falls from a tube in such a way that it forms a cone whose height is always 4/3 times the radius of its base and radius of the base increases at the rate of 1/8 cm/sec. When this radius is 1 meter, the rate at which the amount of sand increases is	
9	Question Image	
10	If Z = (1,2), then Z^{-1}= ?	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)
11	If 2 and 2 are x and y components of vector then its angle with x-axis is	A. 30° B. 45° C. 60° D. 90°
12	$Sin^{-1}(-x)$=	A. Cos⁻¹1/x B. - Sin⁻¹X C. Cot⁻¹X D. None of these
13	Question Image	A. x =0, y =4 B. x = -1, y = 2 C. x = 2, y = 3 D. x = 3, y = 4
14	If n is any positive integer then $2^n > 2(n + 1)$ is true for all	
15	If n is any positive integer then $4^n > 3^n + 4$ is true for all	
16	Total number of subsets that can be formed out of the set {a,b,c} is	A. 1 B. 4 C. 8 D. 12

17	The domain and range of a trigonometric function can be allocate by their	A. graph B. Continuity C. Discontinuity D. Periods
18	The equation of motion of a stone thrown vertically up wards is s = ut - $4.9t^2$the maximum height attained by it =	
19	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
20	If the sum of co-efficient in the expansion of $(a+b)^n$is 4096, then the greatest co-efficient in the expansion is	A. 1594 B. 792 C. 924 D. 2924