Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Domain of $\cos\theta$ is	A. Set of odd numbers B. Set of integers C. Set of real numbers D. Set of complex numbers
2	Which of the following is a vector.	A. work B. time C. density D. electric field
3	The order axioms are satisfied by set of	A. C B. C and R C. R D. None of these
4	A,G,H are in	A. A.P B. G.P C. H.P D. None of these
5	The solution of differential equation:	A. dy/dx+y/x = x²is : B. 4xy = x⁴+ c C. 4x = x⁴= c D. 4 y = x⁴+ c E. 4x=4x³ + c
6	The set R is .....w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group
7	$(x + 2)^2 = x^2 + 4x + 4$ is	A. A linear equation B. A cubic equation C. A quadratic equation D. None
8	Question Image	
9	$\sin^{-1}[-1/2]$ = _____	
10	The distance of the point (-2,3) from x-axis is	A. -2 B. 2 C. 3 D. 1
11	A triangle which is not right is called an _____ triangle	A. Acute B. Obtuse C. Oblique D. None of these
12	Z is the set of integers (Z.*) is a group with a * b = a +b +1, a,b ∈ G.then inverse of a is	A. -a B. a +1 C. -1-a D. None of these
13	In a school there are 150 students Out of these 80 students enrolled for mathematics class.50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 60
14	f(x) = ax + b will be a constant function if	A. a = 1 , b = 1 B. a = 1 , b = 0
15	The process of finding a function whose derivative is given is called a	A. Differentiation B. Integration C. Differential D. None
16	(fog)′(x) =f′(g(x))g′(x) is derivative by	A. Chain rule B. Reciprocal rule C. Power rule D. Product rule

17	If a statement S(n) is true for n = 1 and the truth of S(n) for n = k implies the truth of S(n) for = k + 1, then S(n) is true for all	A. Real numbers n B. Integers n C. Positive integers n D. None of these
18	Question Image	A. 12 B. 13 C. 14 D. 15
19	Question Image	A. [0, 0, 0] B. [1, 0, 0] C. [0, 1, 0] D. [0, 0, 1]
20	The equation of the circle with centre (-h, -k) and radius r is	A. (x +h)²+ (y+k)²= r² B. (x +h)²+ (y-k)²= r² C. (x -h)²+ (y+k)²= r² D. (x -h)²+ (y-k)²= r²