Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The position vector of the point P(a, b, c) is	
2	Question Image	A. 1/2 B. 2 C. 1/4 D. 4
3	If S_r denotes the sum of the first r terms of a G.P., then S_n, $S_{2n} - S_n$, $S_{3n} - S_{2n}$ are in	A. A.P. B. G.P. C. H.P. D. None of these
4	A person standing on the bank of a river observes that the angle of elevation of the top of a tree on the opposite bank of the river is 60° and when he retires 40 meters away from the tree the angle of elevation becomes 30°. The breadth of the river is	A. 40 m B. 30 m C. 20 m D. 60 m
5	The domain the function : $f(x) = x^2$ is given by	A. R B. Set of all non-negative Real numbers C. R⁻¹ D. None of these
6	Sum of all the four forth roots of unity is	A. 1 B. -1 C. i D. 0
7	If a = 2i +2j, b= 3i -j and c=4i +5j, the 3b -a-2c =	A. -i -15j B. i-15j C. i-3j D. None of these
8	For different values of k equation 4x+5y =k represents	A. Parallel lines B. Lines parallel to x -axis C. Perpendicular lines D. Lines parallel to y -axis
9	The degree of differential equation is the power of the	A. Lowest order derivative B. Highest order derivative C. Integral D. All are correct
10	Question Image	
11	The inclination of a line parallel to x-axis is	
12	The additive inverse of 1 is	A. 1 B. -1 C. 0 D. Does not exist
13	If $\mid x \mid < 1$, then the first two terms of $(1 - x)^{1/2}$ are	
14	Question Image	A. Polynomial B. Equation C. Improper rational fraction D. Proper rational fraction
15	Question Image	
16	6 is	A. A prime integer B. An irrational number C. A rational number D. An odd integer
17	The distance of a moving particle at any instant t is x = 3t2 +1 then velocity of particle at t = 10 is	A. 50 cm/sec B. 60 cm/sec C. 61 cm/sec D. None of these
18	If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a	A. Parabola B. Circle C. Hyperbola

		D. Ellipse
19	If the intersection of two sets is non-empty, but either is a subset of other are called	A. Disjoint sets B. Over lapping C. Equal sets D. None of these
20	If C is the mid point of AB and P is any point outside AB, then	