Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 2 C. -2 D. none of these
2	The inclination of a line parallel to x-axis is	
3	The lotus of intersection of perpendicular tangents to the parabola $y^2 = 4ax$ is:	A. Axis of the parabola B. Focal chord of the parabos C. The tangent at vertex of the parabola D. a directrix of the parabola
4	Which of the following is a scalar	A. weight B. force C. speed D. momentum
5	120°=_____	
6	$7^{2n}+ 3^{n-1}. 2^{3n-3}$is divisible by	A. 24 B. 25 C. 9 D. 13
7	Question Image	
8	Tan 360° = _____	A. -1 B. 0 C. 1 D. Undefined
9	Question Image	A. X = 100 sinθ B. X = 10 sinθ C. X = 100 secθ D. None of these
10	Question Image	A. (a + b)c = ac + bc B. a + b = b + a C. (a + b) + c = a + (b + c) D. a(b +c) = ab + ac
11	Question Image	
12	If the function y=2x -3, what is the preimage of 11?	A. 11 B. 7 C. 5 D. 2
13	Question Image	A. 3 sec²x B. 3 sec²3x C. sec²3x D. sec²x
14	A square is inscribed in the circle $x^2+ y^2- 2x + 4y + 3 =0$. Its sides are parallel to the co-ordinate axes. Then one vertex of the square is	
15	The set of all positive even integers is	A. Not a group B. A group w.r.t subtraction C. A group w.r.t division D. A group w.r.t multiplication

16	f(x) = log x + 3 is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
17	Question Image	A. 15 B. 15 i C. -15 i D. -15
18	Three numbers are chosen random without replacement from {1, 2, 3, ..., 10}. the probability that minimum of the chosen numbering is 3 or their maximum is 7	A. 7 / 40 B. 5 / 40 C. 11 / 40 D. None of these
19	sin 2 α=	
20	Tan 3x tan 2x-tan x is equal to	A. Tan x tan 2x tan 3x B. -tan x tan 2x tan 3x C. Tan x tan 2x - tan - tan x tan 3x - tan 2x tan 3x D. None of these