Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 5 B. 25 D. 3
2	The degree of differential equation is the power of the	A. Lowest order derivative B. Highest order derivative C. Integral D. All are correct
3	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
4	How many 3 digit numbers can be formed by using each one of the digit 2, 3, 5, 7, 9 only once?	A. 15 B. 24 C. 60 D. 120
5	$\int Sec^2 (ax + b)\, dx$ is equal to:	A. tan² (ax + b) B. 1/a tan² (ax + b) C. 1/atan (ax +b) D. tan (ax + b)
6	w^{-1}= _____	A. 0 B. 1 C. w D. w²
7	If the cone is cut by a plane perpendicular to the axis of the conec, then the section is a:	A. Circle B. ellipse C. hyperbola D. parabola
8	1^0= _____	A. 360' B. 60" C. 60' D. 3600'
9	Question Image	
10	Question Image	
11	The set {1,2,3,4.....} is called	A. Set of natural numbers B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
12	*P∉A means*	A. Pis subset of A B. Pis an element of A C. P does not belongs to A D. A does not element of P
13	The distance of the point (-2 , -3) from y-axis is	A. 2 B. -2 C. 3 D. -3
14	Let A is a 3 x 3 matrix and B is its adjoint matrix. If |B| = 64, then |A| =	
15	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
16	The slope of the tangent of the circle $x^3 + y^3 = 25$ at (4,3) is:	A. -4/5 B. 4/3 C. -25/4 D. 25/3

17	Tan $2\theta =$	
18	If A is any matrix then its additive inverse is	A. A B. A⁻¹ C. A^t D. -A
19	Question Image	
20	The sum of co-efficient in $(1+x-3x^2)^{4163}$ is	A. 0 B. 1 C. -1 D. None