Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	For Cosine Rule of any triangle ABC, $b^2$is equal to	A. a² - c² + 2ab cos A B. a³ + c³ - 3ab cos A C. a² + c² - 2ac cos B D. a² - c² 4bc cos A
2	If a $(p + q)^2$+ bpq +c = 0 and a $(p + r)^2$+ 2 bpr + c = 0, then qr equals	A. p²+ c/a B. p²+ a/c C. p²+ c/a D. p²- c/a
3	A disjunction of two statement p and q is true	A. p is false B. q is false C. Both p and q are false D. One of p and q is true
4	A function F(x) is called even if	A. F(x) = F (-x) B. F(x) = F(-x) C. F(x) = -F(x) D. 2F(x) = 0
5	Question Image	
6	Maximum value of z =15x +20y subject to 3x+ 4y≤ 12,x,y≥ 0 is given by	A. 46 B. 60 C. 50 D. 70
7	Question Image	
8	Question Image	
9	ax + by < c is linear inequality in	A. four variables B. three variables C. two variables D. one variable
10	If x = 1/x for x ∈ R then the value of x is	A. ±1 B. 0 C. 2 D. 4
11	The arbitrary constants involving in the solution can be determined by the given conditions. Such conditions are called	A. Boundaries B. Variable separable C. Initial values D. None

12	The number of divisors of 1029, 1547 and 122 are in	A. A.P. B. G.P. C. H.P. D. None of these
13	The 60th part of one minute is called	A. Degree B. Second C. Radiam D. None of these
14	Question Image	A. N B. r C. 2r D. π
15	The sum of the roots of the equation x2 -6x +2 = 0 is	A. -6 B. 2 C. -2 D. 6
16	Range of tan$\theta$is	A. Set of complex numbers B. Set of real numbers C. Set of odd numbers D. Set of positive integers only
17	Question Image	
18	If A(x_1, y_1) , B(x_2, y_2) and C(x_3, y_3) are the vertices of a triangle then its centroid is	
19	Question Image	B. ln(x²- x + 1) ⁴+ c
20	{x : xε Z and x < 1} is	A. Singleton set B. A set with two points C. Empty set D. None of these