Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	B. A C. A' D. U
2	Every set is an improper subset of	A. Empty set B. Equivalent set C. Itself D. Singleton set
3	The value of k (k > 0) for which the equation $x^2 + kx + 64 = 0$ and $x^2 - 8x + k = 0$ both will have real roots is	A. 8 B. -16 C. -64 D. 16
4	If the angle between two vectors u and v is 0 orπ, then the vectors u and v are:	A. Orthogonal B. Collinear C. Perpendicular D. None of these
5	$4^{1+x} + 4^{1-x} = 10$ is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
6	Question Image	
7	Question Image	A. 1 B. 2 C. 3 D. 4
8	Question Image	
9	The sets {1, 2, 4} and {4, 6, 8, 10} are	A. Equal sets B. Equivalent sets C. Disjoint sets D. Over lapping sets
10	The second degree equation 2x2 -xy+ 5x -2y +2 =0 represents	A. Circle B. Hyperbola C. Ellipse D. Pair of straight lines
11	A Series which does not coverage to a Unique sum is called	A. Harmonic Series B. Oscillatroy Series C. Arithmetic Series D. None of these
12	If the roots of $ax^2 + b = 0$ are real and distinct then	A. ab > 0 B. a = 0 C. ab < 0 D. a > 0, b > 0
13	The consecutive terms of a progressions are 30, 24, 20. The next term of the progression is	
14	The range of the principal sine function is	
15	If the expansion of $(1 + x)^{20}$, then co-efficient of rth ad (r + 4)th term are equal, then r is	A. 7 B. 8 C. 9 D. 10
16	(a,0) x (c,0) =	A. (0,ac) B. (ac,0) C. (0,0) D. (a,c)
17	The proposition S(n) for any $n \in N$ is only true if $k \in N$ and	A. S(k +1) is true B. S(1) is true and S(k+1) is true whenever S (k) is true C. S(k+1) is true whenever S (k) is true D. S(k) is true

18	If f(α) = b2 and g (c) =d where c=b2 then (gof)(a) is	A. d B. c C. b D. d
19	Question Image	A.
20	(a-1)-1 =	A. a-1 B. a C. -a D. None of above