Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	The equation of the circle with centre (5, -2) and radius 4 is	A. $(x-5)^2 + (y+2)^2 = 16$ B. $(x-5)^2 + (y+2)^2 = 4$ C. $(x-5)^2 + (y-2)^2 = 16$ D. $(x-5)^2 + (y-2)^2 = 4$
3	Question Image	A. 28 / 81 B. 28 / 243 C. 81 / 28 D. 243 / 82
4	The value of sin [arc cos (-1/2)] is	
5	The ratio in which the line y- x+ 2 =0 divides the line joining (3,-1) and (8,9) is	A. 2:3 B. -2:3 C. 3:2 D. -3:2
6	The smallest positive root of the equation tan x - x = 0 lies on	
7	The two lines y = 2x and x =2y are	A. Parallel B. Perpendicular C. Equally inclined with axes D. Congruent
8	The multiplicative inverse of -1 in the set {1-, 1} is	A. 1 B. -1 C. +-1 D. 0
9	A monoid (G, *) is said to be group if	A. have identity element B. is commutative C. have inverse of each element D. None of these
10	Question Image	A. 1 B. 0 C. 3 D. -3
11	The set of integer is	A. Finite group B. A group w.r.t addition C. A group w.r.t multiplication D. Not a group
12	Question Image	C. 1 D. 0
13	If origin is the mid point of (a,3) and (5,b) then	A. a = -5 , b = -3 B. a = 5 , b =3 C. a = -5 , b = 3 D. a = 5 , b = -3
14	Name the property used in 1000 x 1 = 1000	A. additive inverse B. multiplicative inverse C. additive identity D. multiplicative identity
15	If P is a proposition then its negative is denoted by	
16	Question Image	
17	The axis of the parabola $y^2= 4ax$ is	A. X = 0 B. Y = 0 C. X = y D. X = -y
18	The sum of first n even number is	A. n^2 B. n(n+1) C. n+1

C. n+1
D. n+2

| 19 | Question Image | |

20 The maximum value of $12 \sin\theta - 9 \sin^2\theta$ is x

A. 3
B. 4
C. 5
D. None of these