


Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Which of the following represents a vector	D. (x, y)
2	Question Image	
3	If the roots of $ax^2 + b = 0$ are real and distinct then	A. $ab > 0$ B. $a = 0$ C. $ab < 0$ D. $a > 0, b > 0$
4	Question Image	
5	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
6	Question Image	
7	For all points (x, y) in fourth quadrant	A. $x > 0, y < 0$ B. $x > 0, y > 0$ C. $x < 0, y < 0$ D. $x < 0, y > 0$
8	If A is a skew-symmetric matrix of order n and P, any square matrix of order n. prove that $P'AP$ is	A. Skew-symmetric B. Symmetric C. Null D. Diagonal
9	$\sqrt[3]{8.6}$ is approximately equal to	A. 2.488 B. 2.48 C. 2.0488 D. 2.05
10	Question Image	
11	Question Image	A. 16 B. 256 C. 64 D. 1024
12	The distance between the points A(3,1) and B(-2,-4) is	A. 5 B. 25 D. 10
13	The center of the sphere which passes thro' $(a, 0, 0)$, $(0, b, 0)$, $(0, 0, c)$ and $(0, 0, 0)$ is	
14	The general term of the A.P. is	A. $a_{n-1} + (n-1)d$ B. $n + (a_{n-1} - 1)d$ C. $d + (n-1)a_{n-1}$ D. None of these
15	If a, b, c, d, e, f are in A.P., then e-c is equal to	A. $2(c-a)$ B. $2(f-d)$ C. $2(d-c)$ D. $d-c$
16	If $f(\sqrt{x}) = \sin x$, then $f'(x) =$ _____;	A. $2x \cos x^2$ B. $\cos x^2$ C. $\cos \sqrt{x}$ D. None of these
17	Question Image	A. π B. $\frac{\pi}{2}$ C. π D. $\frac{\pi}{4}$
18	Question Image	A. 6, -12, -18 B. -6, 4, 9 C. -6, -4, -9 D. -6, 12, 18

19	G is geometric mean between a and b if a, G, b is	A. A.P. B. G.P. C. H.P. D. None of these
20	Question Image 	A. 1 B. -1 C. 0 D. None of these