Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	D. none of these
2	Which conjunction is not true ?	
3	A quadrilateral whose diagonals are perpendicular bisector of each other is	A. Square B. Rectangle C. Rhombus D. Parallelogram E. Trapezium
4	The value of the expression $3\cos\theta + 4\sin\theta$ lie between	A. -7 and 7 B. -25 and 25 C. -1 and 1 D. -5 and 5
5	Period of sin x is	
6	Question Image	
7	Union of the sets of rational and irrational numbers is called 6th set of	A. Natural numbers B. Real numbers C. Whole numbers D. Prime numbers
8	Question Image	
9	$n(n-1)(2n-1)$, for all natural numbers n, is divisible by	A. 12 B. 6 C. 2 D. 18
10	The quadratic formula is	
11	The coordinates of a point $P(x,y)$ referred to XY-system are	A. $(x+y, y+k)$ B. $(x-h, y-k)$ C. (x,y) D. $(x-h, y-k)$
12	Range of cosec x is _____	A. $\{-1, 1\}$ B. R C. Negative real numbers D. $R - \{ x \mid -1 < x < 1\}$
13	An ellipse slides between two lines at right angles to one another. The locus of its centre is :	A. a parabola B. an ellipse C. a circle D. a hyperbola
14	Question Image	A. 0 C. 1
15	The projections of a line segment on x, y, z axes are 12, 4, 3. The length and the direction cosines of the line segment are	
16	Which of the following is not a quadrantal angle	A. 90° B. 100° C. 180° D. 270°
17	Question Image	
18	The angle between the vectors $\underline{u} = [-3 , 5]$ and $\underline{v} = [6 , -2]$ is:	A. $\pi/2$ B. $-3\pi/2$ C. π D. None of these
19	The magnitude of vector $a=i-3j+5k$ is:	A. 3 B. $\sqrt{35}$ C. $\sqrt{17}$ D. $\sqrt{35}$
20	If a tangent line touches the function $y = f(x)$ in more than one point then $y = f(x)$ is	A. Periodic B. Surjective C. Bijective