

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Projection of vector $u$ along $v$ is	A. $ v  \cos\theta$ B. $ u  \cos\theta$ C. $ v  \sin\theta$ D. $ u  \sin\theta$
2	Question Image	
3	Question Image	
4	$\tan^{-1}x > \cot^{-1}x$ holds for	A. $x > 1$ B. $x < 1$ C. $x = 1$ D. All values of $x$
5	Question Image	
6	The constant distance of all points of the circle from its centre is called the	A. radius of the circle B. secant of the circle C. chord of the circle D. diameter of the circle
7	The points $(5, 0, 2)$ , $(2, -6, 0)$ , $(4, -9, 6)$ and $(7, -3, 8)$ are vertices of a	A. Square B. Rhombus C. Rectangle D. Parallelogram
8	The solution of the quadratic equation $x^2 - 7x + 10 = 0$ , is	A. 2 B. 5 C. 2, 5 D. 7
9	The set which has no proper subset is	A. $\{0\}$ B. $\{\}$ C. $\{\emptyset\}$ D. None of these
10	The range of the principle cot function is	
11	Question Image	
12	The system of measurement in which the angle is measured in radians is called the	A. circular system B. CGS system C. sexagesimal system D. none of these
13	Question Image	
14	A diagonal matrix is always	A. Identity B. Triangular C. Scalar D. Non-singular
15	Question Image	
16	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is $45^\circ$ . The height of the tower is	A. 37m B. 97m C. 101m D. 70m
17	The numbers of $G_1, G_2, G_3, \dots, G_n$ are called $n$ geometric means between $a$ and $b$ if $a, G_1, G_2, G_3, \dots, G_n, b$ are in	A. H.P. B. A.P. C. G.P. D. None of these
18	If a plane passes through the vertex of a cone then the intersection is	A. an ellipse B. a hyperbola C. a point circle D. a parabola
19	The differential equations of all conis whose axes coincide with the co-ordinate axis is	
20	$3x + 4 < 0$ is	A. not inequality B. equation

