

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	A. 2 b B. 2 a C. 2 ab D. a + b
3	Question Image	
4	E-radius corresponding to $\angle B$ is	
5	Which conjunction is not true ?	
6	Question Image	
7	Projection of vector $u$ along $v$ is	A. $ v  \cos \theta$ B. $ u  \cos \theta$ C. $ v  \sin \theta$ D. $ u  \sin \theta$
8	The range of the function $f: x \rightarrow y$ is defined by	A. $\{x   y = f(x) \forall x \in X \wedge y \in y\}$ B. $\{(x, y)   y = f(x) \forall x \in X\}$ C. $\{y   y = f(x) \forall x \in X \wedge y \in y\}$ D. $Y$
9	A square matrix $A = [a_{ij}]$ is upper triangular when	A. $c_{ij} = 0$ B. $b_{ij} = 0$ C. $a_{ij} = 0$ for all $i > j$ D. $d_{ij} = 0$
10	Domain of $1 + \cot 2\theta = \csc 2\theta$ is	A. $[0, \pi]$ B. $R - \{x/x = n\pi, n \in Z\}$ C. $(-\infty, +\infty)$ D. $[-1, 1]$
11	The sum of $n$ terms of a series is denoted by	A. $d$ B. $n$ C. $S_n$ D. $a_n$
12	Question Image	A. 2, 3 B. 3, 3 C. 2, 6 D. 2, 4
13	The multiplicative inverse of $x$ such that $x \neq 0$ is	A. $-x$ B. Does not exist C. $1/x$ D. $\pm 1$
14	The value of $\sin 28^\circ \cos 17^\circ + \cos 28^\circ \sin 17^\circ$ is	
15	The solution of the equation $3 \tan^2 x = 1$ is _____	D. none of these
16	In set builder notation the set $\{0, 1, 2, \dots, 100\}$ can be written as	A. $\{x / x \in B \wedge x \leq 100\}$ B. $\{x / x \in W \wedge x \leq 101\}$ C. $\{x / x \in Z \wedge x \leq 101\}$ D. The set of first 100 whole numbers
17	The equation of the parabola with directrix $x = 2$ and the axis $y = 0$ is	A. $y^2 = 8x$ B. $y^2 = -8x$ C. $y^2 = 4x$ D. $y^2 = -4x$
18	Question Image	D. none of these
19	Number of lines passing through three non-collinear points is	A. 2 B. 3 C. 1 D. 0 E. $\infty$

