

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$\cos(a-\beta) = \underline{\hspace{2cm}}$ ;	A. $\sin a \cos \beta + \cos a \sin \beta$ B. $\sin a \cos \beta - \cos a \sin \beta$ C. $\cos a \cos \beta + \sin a \sin \beta$ D. $\cos a \cos \beta - \sin a \sin \beta$
2	If the circumference of a circle is divided into 360 congruent parts, the angle subtended by one part at the centre of the circle is	A. $1^{\circ}$ B. $1'$ C. $1''$ D. 1 rad
3	Rank of matrix $\begin{bmatrix} 1 & 3 & 5 & 0 \end{bmatrix}$ is	A. 1 B. 3 C. 2 D. 4
4	Three unbiased coins are tossed. Then the probabilities of getting two heads is	A. $\frac{3}{8}$ B. $\frac{1}{8}$ C. $\frac{1}{4}$ D. None of these
5	Question Image	
6	Question Image	
7	Empty set is	A. Not subset of every set B. Finite set C. Infinite set D. Not the member of real numbers
8	For non-trivial solution $ A $ is	A. $A = 0$ B. $A < \sup < /sup > = 0$ C. $ A  = 0$ D. None of these
9	Question Image	
10	If A and B are two sets then intersection of A and B is denoted by	
11	Three numbers are chosen random without replacement from $\{1, 2, 3, \dots, 10\}$ . the probability that minimum of the chosen numbering is 3 or their maximum is 7	A. $\frac{7}{40}$ B. $\frac{5}{40}$ C. $\frac{11}{40}$ D. None of these
12	If $Z = (1, 2)$ , then $Z^{-1} = ?$	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)
13	Two matrices A and B are conformable for the product AB if	A. Both A and B are square B. Both A and B are symmetric C. Number of rows of A = number of columns of B D. Number of columns of A = number of rows of B
14	Question Image	
15	The eccentricity of the parabola $y^2 = -8x$ is	A. -2 B. 2 C. -1 D. 1
16	Question Image	
17	Question Image	A. -1 B. 0 C. 1 D. None of these
18	The zero vector is regarded to be parallel to	A. Every vector B. Is some cases C. Both a, b D. None

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19	The polynomial $x - a$ is a factor of the polynomial $f(x)$ if and only if	A. $f(a)$ is positive B. $f(a)$ is negative C. $f(a) = 0$ D. None of these
20	The value of $x$ for which the polynomials $x^2 - 1$ and $x^2 - 2x + 1$ vanish simultaneously is	A. 2 B. 1 C. -1 D. -2

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