

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. I quadrant B. II quadrant C. III quadrant D. IV quadrant
2	If $ax^2 + bx + c = 0$ is satisfied by every value of x, then	A. $b = 0, c = 0$ B. $c = 0$ C. $b = 0$ D. $a = b = c = 0$
3	The line $3x - 4y = 0$	A. Is a tangent to the circle $x^2 + y^2 = 25$ B. Is a normal to the circle $x^2 + y^2 = 25$ C. Does not meet the circle $x^2 + y^2 = 25$ D. Does not pass thro' the origin
4	Question Image	A. $\cos x$ B. $-\sin x$ C. $-\cos x$ D. $\tan x$
5	Question Image	A. $\sec x \tan x$ B. $\cos^2 x$ C. $\sin^2 x$ D. $\sec^2 x$
6	Question Image	D. none of these
7	Question Image	A. $x = 0, y = 4$ B. $x = -1, y = 2$ C. $x = 2, y = 3$ D. $x = 3, y = 4$
8	In one hour, the hour hand of a clock turns through	
9	Question Image	A. real number B. complex number C. rational number D. irrational number
10	Minor of an element a_{ij} is denoted by	A. M_{ij} B. A_{ij} C. $ A $ D. None of these
11	$\vec{O}(0,0)$ is called:	A. Position vector B. Free vector C. Unite vector D. Null vector
12	The length of the tangent from (2, 1) to the circle $x^2 + y^2 + 4y + 3 = 0$ is	
13	$\cos(a-\beta) =$ _____;	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. $\cos a \cos \beta - \sin a \sin \beta$
14	If $S = \{3, 6, 9, 12, \dots\}$, then	A. $S =$ Four multiples of 3 B. $S =$ Set of even numbers C. $S =$ Set of prime numbers D. $S =$ All multiples of 3
15	Question Image	
16	If P is a proposition then its negative is denoted by	
17	Question Image	
18	The equation of vertical asymptotes of $y = \cos ecx$ is	A. $x = 0$ B. $y = 0$ C. $x = \infty$ D. $y = \infty$

19 Let A and B be two sets. If every element of A is also an element of B then

20 Six boys and 3 girls are to be seated at random, in a row, for a photograph. The probability that no two girls will sit together is

- A. $\frac{1}{12}$
 - B. $\frac{1}{6}$
 - C. $\frac{5}{12}$
 - D. $\frac{7}{12}$
-