

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$\cos 2\alpha =$	<p>A. <math>\sin^2\alpha + \cos^2\alpha</math></p> <p>B. <math>-\cos^2\alpha</math></p> <p>C. <math>\tan^2\alpha</math></p> <p>D. None of these</p>
2	In $(x + iy)$ , $y$ is called as	<p>A. Imaginary part</p> <p>B. Complex number</p> <p>C. Real part</p> <p>D. None of above</p>
3	A relation in which the equality is true only for some values of the known is called _____	<p>A. An identity</p> <p>B. An equation</p> <p>C. A polynomial</p> <p>D. None of these</p>
4	If $a, \beta$ are the roots of $ax^2+bx+c=0$ , the equation whose roots are doubled is	<p>A. <math>ay^2 + 2by+c=0</math></p> <p>B. <math>ay^2+2by+4c=0</math></p> <p>C. <math>ay^2+2by+c=0</math></p> <p>D. <math>ay^2+by+4c=0</math></p>
5	If $f(x) = x^2-x$ then $f(1)$ is	<p>A. 0</p> <p>B. 1</p> <p>C. 2</p> <p>D. 3</p>
6	Question Image <input type="text"/>	<p>A. 3, -3, 11</p> <p>B. 3, 3, 11</p> <p>C. -3, 3, -11</p> <p>D. -3, -3, 11</p>
7	The line $2x + \sqrt{6}y = 2$ is a tangent to the curve $x^2 - 2y^2 = 4$ The point of contact is	<p>A. <math>(\sqrt{6}, 1)</math></p> <p>B. <math>(2, 3)</math></p> <p>C. <math>(7, -2\sqrt{6})</math></p> <p>D. <math>(4, -\sqrt{6})</math></p>
8	$\tan 30^\circ =$ _____	
9	Question Image <input type="text"/>	<p>A. 1, 1/2, 0</p> <p>B. 1, 2, 1</p> <p>C. 1, 2, 3</p> <p>D. 1, 2, 0</p>
10	The equation of the directrix of the parabola $x^2 = 4ay$ is	<p>A. <math>x + a = 0</math></p> <p>B. <math>x - a = 0</math></p> <p>C. <math>y + a = 0</math></p> <p>D. <math>y - a = 0</math></p>
11	Question Image <input type="text"/>	
12	The logic in which every statement is regarded as true or false and no other possibility is called	<p>A. Aristotelian logic</p> <p>B. Inductive logic</p> <p>C. Non-Aristotelian logic</p> <p>D. None of these</p>

13	The value of $i^{4n+1}$	B. -1 C. $i$ D. $i^{2^2}$
14	What is the period of $\cos 6x = ?$	A. $\pi/2$ B. $\pi/3$ C. $\pi/4$ D. $\pi$
15	Range of $\sin \theta$ is	
16	The coordinates of the point that divides the join of A(-6,3) and B(5, -2) in the ratio 2:3 externally are	
17	The period of the trigonometric function $y = \sin x \cos x$ is	A. $2\pi$ B. $\pi$ C. $4\pi$ D. $\pi / 2$
18	Every prime number is also	A. Rational number B. Even number C. Irrational number D. Multiple of two numbers
19	$3/4$ is _____	A. An odd number B. An even number C. A natural number D. A rational number
20	Question Image <input type="text"/>	