

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The middle term in the expansion of $(a+x)^{12}$ is	A. 7th B. 8th C. 9th D. 6th
2	Question Image	A. 2 and 9 B. 3 and 2 C. 2/3 and 9 D. 3/2 and 6
3	Question Image	A. (g,f) B. (-g,f) C. (g,-f) D. (-g,-f)
4	If A is an event then which of the following is true	A. $P(A) < 0$ B. $0 \leq P(A) \leq 1$ C. $P(A) > 0$ D. None
5	Question Image	A. 0 C. 1
6	$\cos(a+\beta) - \cos(a-\beta) =$ _____;	A. $2\cos a \cos \beta$ B. $2\sin a \cos \beta$ C. $-2\sin a \cos \beta$ D. $-2\sin a \sin \beta$
7	With usual notations $b^2 = a^2 + c^2 - 2ac \cos$ is called _____;	A. None of these B. Law of sines C. Law of cosines D. Law of tangents
8	If n is any positive integer , then $2+4+6+\dots+2n =$	A. 2^{n+1} B. $2^{n+1} + 1$ C. $n^{n+1} + 1$ D. $n(n+1)$
9	The domain of $y = \sqrt{x^2 - 9}$ is	A. R B. $(0, +\infty)$ C. $(-\infty, -3) \cup (3, +\infty)$ D. $(0, \infty)$
10	120° degrees are equal to how many radians?	
11	A circle passing through the vertices of any triangle is called	A. Circumcircle B. Incircle C. Escribed circle D. Unit circle
12	$\sin(\pi/2 + \theta) =$ _____;	A. $\sin \theta$ B. $\cos \theta$ C. $-\sin \theta$ D. $-\cos \theta$
13	The standard parabolic form of the equation $f(x) = x^2 + 4x + 1$ is	A. $x(x+4)+1$ B. $(x+2)^2 - 3$ C. $(x+4)^3 + 9$ D. $x(x-2)^2 + 1$
14	The sum of the cubes of three consecutive natural number is divisible by	A. 9 B. 6 C. 5 D. 10
15	Which of the following is a scalar.	A. electric field B. magnetic field C. weight D. mass
16	The roots of the equation $ax^2 + bx + c = 0$ are complex/imaginary if	A. $b^2 - 4ac < 0$ B. $b^2 - 4ac = 0$ C. $b^2 - 4ac > 0$ D. None of these

17	i is equal	A. (1 , 0) B. (0 , 1) C. (1 , 1) D. (0 , 0)
18	Question Image	
19	The equation of the circle with centre (-h, -k) and radius r is	A. $(x + h)^2 + (y + k)^2 = r^2$ B. $(x + h)^2 + (y - k)^2 = r^2$ C. $(x - h)^2 + (y + k)^2 = r^2$ D. $(x - h)^2 + (y - k)^2 = r^2$
20	$i^3 =$	A. -1 B. i C. -i D. 1