Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. A prime number B. An integer C. A whole number D. An irrational number
2	The equation of motion of a stone thrown vertically up wards is $s = ut - 4.9t^2$ the maximum height attained by it =	
3	In how many ways can 5 persons be seated at a round table	A. 5! B. 4! C. 3! D. 120
4	Fundamental law is	
5	The eccentricity of ellipse becomes zero, then it takes the form of:	A. a parabols B. a straight line C. a circle D. None of these
6	The line $2x + \sqrt{6}y = 2$ is a tangent to the curve $x2 - 2y2 = 4$ The point of contact is	A. $(\sqrt{6},1)$ B. $(2,3)$ C. $(7,-2\sqrt{6})$ D. $(4,-\sqrt{6})$
7	If $f(x) = -x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
8	The locus of the centre of a circle which touches two given circles externally is:	A. a hyperbola B. an ellipse C. a circle D. a parabola
9	for $n \in N$, 3^{2n+7} is divisible by	A. 7 B. 8 C. 9 D. 10
10	Two balanced dice are tossed once, the sample space when the integers on the faces of two dice are the same is	A. {(1, 1), (2, 2), (3, 3)} B. {(4, 4), (5, 5), (6, 6)} C. {(1, 1), (2, 2), (3, 3), (4, 4), (5, 5), (6, 6)} D. None of these
11	The set {Z\{0}} is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
12	Any recurring decimal represents a	A. Irrational no B. Integer C. Rational no D. None of these
13	The equation of line passing through intersection of line $x = 0$ and $y = 0$ and the point (2,2) is	A. $y = x$ B. $y = x - 1$ C. $y = x + 1$ D. $y = x + 1$
14	The roots of $(b-c)x2+(c-a) x+a-b=0$ are equal if	A. $2b = a+c$ B. $2a = b+c$ C. $2c = a+b$ D. $a + b + c = 0$
15	If T = {2,4,6,8,10,12}, then	A. T = (First six natural numbers) B. T = (First six odd numbers) C. T = (First six real numbers) D. T = (First six even numbers)
16	Question Image	A. - cos x B. sin x C. - sin x

		D. sec x
17	Question Image	A. 0 B. -1 C. 1 D. -2
18	What is the conjugate of -6 -i	A. -6 +i B. 6 + i C. -6 -i D. 6 -i
19	The inclination of a line parallel to y-axis is	
20	If cos 20°=K and cos x=2 k^2-1, then the possible values of x between 0° and 360° are	A. 140° B. 50° and 140° C. 50° and 130° D. 40° and 320°