Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	D. none of these
2	Question Image	A. 30° B. 45° C. 60° D. 120°
3	If the intersecting plane is parallel to a generator of the cone, but intersects its one nappe only, the curve obtained is	A. an ellipse B. a hyperbola C. a circle D. a parabola
4	an -an-1, $\forall n \in N \wedge n>1$ in an A.P is called	A. Common difference B. nth term C. Common ratio D. None of these
5	Question Image	
6	Question Image	A. sin h x B. cos h x C. sec h x D. cosec h x
7	In the expansion of (x+y)n the coefficient of 5th and 12th terms are equal then n=	A. 12 B. n=14 C. 17 D. n=15
8	Question Image	A. 1 B. 5 C. 7 D. 9
9	Question Image	A. a = 2, b = 3 B. a = 3, b = 2 C. a = 2, b = 1, 2 D. a = 3, b = 3
10	y=0 of the parabola $y^2 = 4ax$ is the	A. equation of directirx B. Equatio of the tangent C. Equation of axis D. equation of latus rectum
11	If $\sin x + \sin^2 x = 1$, then the value of $\cos^{12} x + 3\cos^{10} x + 3\cos^8 x + \cos^6 x + 2\cos^4 x + \cos^2 x - 2$ is equal to	A. 0 B. 1 C. 2 D. sin²x
12	Question Image	A. I quadrant B. II quadrant C. III quadrant D. IV quadrant
13	The point R dividing externally the line joining the points $P(x_1, y_1)$ and $Q(x_2, y_2)$ in the ratio $k_1 : k_2$ has the coordinates	
14	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. 1/12 B. 1/6 C. 5/12 D. 7/12
15	$4/\sqrt{49}$ is a	A. Irrational Number B. Prime Number C. Rational number D. Whole number
16	Question Image	A. a sec(ax + b) + c B. - a sec(ax + b) + c
17	Question Image	
18	Four cards are drawn at random from a pack of 52 playing cards. The probability of getting	A. 44/4165 B. 22/4165

18	all the four cars of the same suit is	C. 11/4165 D. None of these
19	The line 2x +√6y =2 is a tangent to the curve x2 -2y2 =4 The point of contact is	A. (√6,1) B. (2,3) C. (7,-2√6) D. (4,-√6)
20	sin5θ+sin3θ = _____;	A. 2sin 4θ cosθ B. 2cos 4θ sinθ C. 2cos 4θ cosθ D. -2sin 4θ sinθ