Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If eccentricity of ellipse becomes zero then it takes the form of	A. A parabola B. A circle C. A straight line D. None of these
2	The projections of a line segment on x, y, z axes are 12, 4, 3. The length and the direction cosines of the line segment are	
3	If x - 1 is a factor of x4 - 5x2 + 4 then other factor is	A. (x + 2)2(x - 1) B. (x + 2)(x - 1)2 C. (x+2)(x2- x- 2) D. (x + 2)2(x - 1)2
4	The behavior of trigonometric function is called	A. Continuity B. Discontinuity C. Periodicity D. Smoothness
5	The maximum value of 12 $\sin\theta$-9 $\sin^2\theta$is x	A. 3 B. 4 C. 5 D. None of these
6	If (0,4) and (0,2) are vertex and focus of the parabola respectively, the the equation of the parabola is:	A. x² = 4y -32 B. x² =8y -32 C. y³ = 16 x D. x2 + 8y =32
7	Point (2,0) lies on trigonometric function f(x)=_____;	A. sinx B. cosx C. tanx D. secx
8	The measure of the angle subtended at the centre of the circle by an arc, whose length is equal to the radius of the circle is	A. 1⁰ B. 1' C. 1" D. 1 rad
9	Question Image	
10	Question Image	A. 12 B. 13 C. 14 D. 15
11	Question Image	A. 1 B. 2 C. 3
12	If n(A) = n then n(P(A)) is	A. 2n B. n² C. n/2 D. 2ⁿ
13	The equation |x + 4| = x has solution	A. x = -2 B. x = 2 C. x = -4 D. x = 4
14	Which of the following is factor of x11+a11, where n is an odd integer	A. x-a B. x+a C. 2x-a D. 2x+a
15	A dice is rolled. The probability that the dots on the top are greater than 4 is	A. 1/6 B. 1/3 C. 1/2 D. 1
16	Derivative of x^3w.r.t x is	A. 0 B. 1 C. 3x² D. x³

17	If $x^3 + ax^2 - a^2x - a^3$ is divided by x + a, then the remainder is	A. 0 B. a³ C. 2a³ D. -2a³
18	Question Image	A. 1 / 2 B. 1 / 3 C. 1 / 4 D. None of these
19	In one hour, the minute hand of a clock turns through	
20	An equation which holds good for all values of variables is called	A. Equation B. Conditional equation C. Constant D. None