Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	f(x) = 1 is	A. identity function B. constant function C. linear function D. quadratic function
3	When rational fraction is separated into partial fractions, the result is	A. an identity B. A fraction C. A partial sum D. Improper fraction
4	The length of the tangent from (2, 1) to the circle $x^2 + y^2 + 4y + 3 = 0$ is	
5	If a tangent line touches the function y = f (x) in more than one point then y = f (x) is	A. Periodic B. Surjective C. Bijective D. Injective
6	For each natural number n, n (n+1) is	A. an even B. an odd C. multiple of 3 D. Irrational
7	(1,0) is in the solution of the inequality	A. 3x + 2y > 8 B. 2x - 3y < 4 C. 2x + 3y > 3 D. x - 2y < -5
8	Range of cosec$\theta$is	A. W - {y | -1 < y < 1} B. R - {y | -1 < y < 1} C. O - {y | -1 < y < 1} D. R
9	There may be _____ feasible solution in the feasible region	A. Infinite B. Finite C. Defined D. None of above
10	If uv= Projuv then	A. Uandvare parallel B. vis a unit vector C. Uis a unit vector D. Both b and c
11	Question Image	A. a = 4, b = 1 B. a = 1, b = -4 C. a = 0, b = 4 D. a = 2, b = 4
12	Question Image	A. 3 B. 1 C. 4
13	The value of x and y when (x + iy)2 = 5 - 4i	A. x = 2, y = -1 B. x = -2, y = 1 C. x = 2, y = -i D. x = 2, y = 2
14	If $x^3 + 4x^3 - 2x + 5$ is divided by x - 1, then the reminder is	A. 8 B. 6 C. 4 D. None of these
15	If distance of (a,b) from y-axis is 2 then	A. a = 2 B. b = 2 C. a = b D. a = 4
16	The degree of differential equation is the power of the	A. Lowest order derivative B. Highest order derivative C. Integral D. All are correct
		A. 3a2

17	For f(x) = x2, what is the value of f(a) +f (-a) in terms of a?	B. 2a2 C. 2a D. -7a
18	If C={p/p < 18, p is a prime number}, then C =	A. {2,3,4,.....17} B. {2,4,6,8.....16} C. {1,3,5,7,9,11,13,15,17} D. {3,6,9,12,15}
19	Question Image	
20	When we expand $(a + 2b)^5$then	A. a⁵+ 10a⁴b + 40a³b²+ 80a²b³+ 80ab⁴+ 32b⁵ B. a⁵+ a⁴b + a³b²+ a²b³+ ab⁴+ b⁵ C. 5a⁵+ 4a⁴b + 3a³b²+ 2a²b³+ 1 ab⁴+ b⁵ D. None