

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	The equation $x^2 + y^2 - 8x + 6y + 25 = 0$ represents	A. A circle B. A pair of straight lines C. A point D. None of these
3	A _____ divides the plane into left and right half planes.	A. Vertical line B. Horizontal line C. Non vertical line D. Inequality
4	If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$, then which expression defines the product of z_1 and z_2 ?	A. $36 + (-32)i$ B. $-36 + 32i$ C. $6 + (-11)i$ D. $0 + (-12)i$
5	If the graph of f is entirely below the x -axis, then the value of definite integral is	A. $= 0$ B. < 0 C. > 0 D. None
6	The period of $\operatorname{cosec} 10x$ is _____	
7	Zero is	A. An irrational number B. A rational number C. A negative integer D. A positive number
8	The set of real roots of the equation $\log_{(5x+4)}(2x+3)^3 - \log_{(2x+3)}(10x^2 + 23x + 12) = 1$ is	A. $\{-1\}$ B. $\{-3/5\}$ C. Empty set D. $\{-1/3\}$
9	Question Image	D. none of these
10	If $f(x) = (-x)^2$ then $f(-2)$ is	A. 0 B. 2 C. -4 D. 4
11	the curve of the parabola $y^2 = -4ax$ is symmetric with respect to	A. x-axis B. y -axis C. Both x and y -axis D. None of these
12	Question Image	A. 1 D. -1
13	The polar form of complex number $x + iy =$	A. $r \cos \theta + r \sin \theta$ B. $r \cos \theta + i r \sin \theta$ C. $\cos \theta + r \sin \theta$ D. $i \cos \theta + i \sin \theta$
14	If $a > 0, b > 0, c > 0$ then the roots of the equation $ax^2 + bx + c = 0$ are	A. Real and negative B. Non-real with negative real parts C. Real and positive D. Nothing can be said
15	The n th term of a G.P. is	A. $a ⁿ r ⁿ$ B. $a ⁿ⁺¹ r ⁿ⁺¹$ C. $a <sup>n-1</sup> r <sup>n-1</sup>$ D. $a ⁿ r ⁿ$
16	Question Image	A. $a \tan(ax + b) + c$ B. $-a \tan(ax + b) + c$
17	Question Image	A. $p < r$ B. $p > r$ C. $p + r < 0$ D. $p - r < 0$
18	The roots of $(x - a)(x - b) = abx^2$ are always	A. Real B. Depends upon a C. Depends upon b

C. Depends upon b
D. Depends upon a and b

19 If A is a non singular matrix then $A^{-1} =$ _____

20 Question Image

C. 2x
D. 2
