

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	An equation containing at least one derivative of a depends variable with respect to independent variable is a (an)	A. Implicit equation B. Differential equation C. General equation D. None of these
2	The angle AOP which the ray from an observer's eye at O to an object at P at a lower level makes with horizontal ray OA through O is called the	A. Angle of depression B. Angle of elevation C. Acute angle D. Obtuse angle
3	The equations of the line thro' the point (2, 3, -5) and equally inclined to the axis are	
4	Question Image	
5	Question Image	A. 1 B. 5 C. 7 D. 9
6	The distance between the points (0 , 0) and (2, 1) is	A. 5 C. 0 D. 3
7	Question Image	
8	Find a if 1 is a root of the equation $x^2 + ax + 2 = 0$	A. 3 B. -3 C. 2 D. 0
9	$\sin(2\pi - \theta)$	A. $\cos \theta$ B. $\sin \theta$ C. $\tan \theta$ D. $-\sin \theta$
10	Question Image	A. n(A) B. n(B) C. 0 D. 1
11	The function $\phi(x)$ is an anti derivative of function $f(x)$ , $x \in D$ if	A. $\phi'(x) = f(x)dx$ B. $\phi(x) = f(x)dx$ C. $\phi'(x) = f(x)$ D. $\phi(x) = f'(x)dx$
12	The number of real tangents that can be drawn to the ellipse $3x^2 + 5y^2 = 32$ passing thro. (3, 5) is	A. 0 B. 1 C. 2 D. Infinite
13	Question Image	A. 5 B. 10 C. 20 D. 30
14	If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a	A. parabola B. circle C. hyperbola D. ellipse
15	The set of rational numbers between 0 and 1 is	A. Finite B. Null set C. Infinite D. None of these
16	An experiment yields 3 mutually exclusive and exhaustive events A, B, C, if $P(A) = 2$ and $P(B) = 3$ . then $P(C) =$	A. 1 / 11 B. 2 / 11 C. 3 / 11 D. 6 / 11

17	The distance between the points (1, 2) and (2, 1) is	A. 3 B. 6
18	The solution set of the equation $ 3x + 2  = 5$ is	
19	If $n$ is any positive integer then $3 + 6 + 9 + \dots + 3n =$ _____	
20	<div data-bbox="242 266 1096 295" data-label="Text"> <p>Question Image</p> </div>	A. $b = c$ B. $a = c$ C. $a = c$ D. $b = 0$