

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A function in which the variable appears as exponent is called:	A. An identity function B. A logarithmic function C. an exponential function D. A rational function
2	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
3	Question Image	A. 0 B. -1 C. 1/2 D. 1
4	The point which divides the line segment joining the points (a, b) and (c, d) in the ratio 2 : 3 internally is	D. none of these
5	Question Image	A. 0 B. -1 C. 1
6	Question Image	A. $\sec x \tan x$ B. $\cos^2 x$ C. $\sin^2 x$ D. $\sec^2 x$
7	The proposition $S(n)$ is true $\forall n \in \mathbb{N}$ , $S(k+1)$ true when _____ is true	A. $S(1)$ B. Both a & c C. $S(k)$ D. None
8	The period of $ \sin 2x $ is	A. $\pi/2$ B. $-\pi/2$ C. $\pi$ D. $\pi/3$
9	A circle passing through the vertices of any triangle is called _____	A. In circle B. Circum circle C. Escribed circle D. None of these
10	Question Image	
11	Question Image	
12	Question Image	
13	The multiplicative inverse of $1 - 2i$ is	
14	Question Image	A. $3 \times 1$ B. $1 \times 3$ C. $3 \times 3$ D. $1 \times 1$
15	Question Image	
16	If $\sin 6\theta + \sin 4\theta + \sin 2\theta$ , then $\theta =$	
17	$\cos 60^\circ =$ _____	A. 1 B. 2 C. 1/2 D. 3
18	A card is drawn from a pack of cards numbered 2 to 53. the probability that the number on the card is prime number less than 20 is	A. 2 / 13 B. 4 / 13 C. 5 / 13 D. 8 / 13
19	The sum of the even coefficients in the expansion $(1 + x)^n$ is	A. $2^{n-1}$ B. $2^{n-2}$ C. $2^{n-1}$ D. $2^n$

