

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$f(x) = \sin x$ is:	A. an odd function B. an even function C. an implicit function D. an exponential function
2	Question Image	
3	The integral of $3x^5 dx$ is:	A. $15x^{<sup>4</sup>}$ B. $x^{<sup>6</sup>}/2$ C. $1/6x^{<sup>5</sup>}$ D. $x^{<sup>5</sup>}/\ln 3$
4	Question Image	A. 1 B. -1 C. 0 D. I
5	The value of $x$ which is unchanged by the mapping in the function defined by $f; x \mapsto x^2 + 5x - 5$ for $x > 0$ is	A. 1 B. 5 C. -5 D. -1
6	What is the conjugate of $-7 - 2i$ ?	A. $-7 + 2i$ B. $7 + 2i$ C. $7 - 2i$ D. None of these
7	The set $(Q, .)$	A. Forms a group B. Does not form a group C. Contains no additive identity D. Contains no additive inverse
8	The roots of the equations will be equal if $b^2 - 4ac$ is	A. Positive B. Negative C. 1 D. Zero
9	For $f(x) = x^2 + px + 1$ , if $f(3) = 3$ then $P =$	A. $3/7$ B. $-2/5$ C. $-7/5$ D. $-7/3$
10	Question Image	A. $\sinh x$ B. $\cosh x$ C. $\tanh x$ D. $\coth x$
11	The set of natural is a semi group w.r.t	A. Addition B. Division C. Subtraction D. None of these
12	The system of measurement in which the angle is measured in radians is called the	A. circular system B. CGS system C. sexagesimal system D. none of these
13	The law of cosines reduces to $a^2 + c^2 = b^2$ for	A. $\alpha = 90^\circ$ B. $\beta = 90^\circ$ C. $\gamma = 90^\circ$ D. $\alpha + \beta + \gamma = 180^\circ$
14	Question Image	
15	If $a = 5i + 2j$ , then $ a  =$	A. $\sqrt{13}$ B. $\sqrt{7}$ C. $1/\sqrt{13}$ D. $\sqrt{29}$
16	If $f(x) = a_0 + a_1x + a_2x^2 + a_3x^3 + \dots + a_{n-1}x^{n-1} + a_nx^n$ then $f(n)(x)$ is equal to	A. $n!$ B. $ann!$ C. 0 D. an

17	Question Image	
18	The eccentricity $e$ of an ellipse is always	A. Rational B. Real C. Irrational D. Integer
19	The set $\{-1, 1\}$ is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
20	In order of A is $m \times n$ and order of B is $n \times p$ then order of AB is	A. $m \times m$ B. $n \times n$ C. $m \times p$ D. $p \times m$