

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $f(x) = ax^2$ , and $a > 0$ , then the lowest point on the parabola is called.	A. Vertex of parabola B. Co-ordinates of parabola C. Roots of the equation D. Coefficient of the equation
2	Question Image	
3	The are of the circle centred at ( 1 , 2) and passing through ( 4 , 6) is:	A. $10\pi$ B. $25\pi$ C. $5\pi$ D. $25/2\pi$
4	A,G,H are in	A. A.P B. G.P C. H.P D. None of these
5	Question Image	
6	If for two events A and B , $P(A \cup B) = 1$ , then events A and B are	A. Certain events B. Mutually exclusive C. Complementary events D. Independent
7	Question Image	
8	Range of $\sin x$ is _____	A. $[-1, 1]$ B. R C. Negative real numbers D. None of these
9	Question Image	
10	An equation in which at least one term contains $dy/dx$ , $d^2 y / dx^2$ etc, is called.	A. Differential equation B. Initial condition C. General solution D. Singular equation
11	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. $2^n$
12	The multiplicative inverse of x such that $x \neq 0$ is	A. -x B. does not exist C. $1/x$ D. 0
13	If A and B are two matrices such that $AB = B$ and $BA = A$ then $A^2 + B^2 =$	A. $2AB$ B. $2BA$ C. $A + B$ D. AB
14	Which is not a half plane	A. $ax + by < c$ B. $ax + by > c$ C. Both A and B D. None
15	The 31 term of the A.P 5,2,-1.....is	A. -82 B. 82 C. 85 D. -85
16	Question Image	C. 0 D. 1
17	$i^2 =$	A. 1 B. 2 C. -1 D. 0
18	What is the conjugate of $-6 - i$	A. $-6 + i$ B. $6 + i$ C. $-6 - i$ D. $-6 - i$

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| 19 | The probability of getting a number between 1 and 100 which is divisible by 1 and itself if only is | A. $1/4$<br>B. $1/2$<br>C. $3/4$<br>D. $25/98$ |
| 20 | The consecutive terms of a progressions are 30, 24, 20. The next term of the progression is         |  |