

## Mathematics General Science Test Medium Mode


Sr	Questions	Answers Choice
1	The formula $a_n = a + (n-1)d$ for an A.P is called	A. nth term of an A.P B. Sum of first n terms C. A.M between a and b D. None of the above
2	If $f(x) =  x $ , then (0,0) is the	A. Critical point B. Inflection point C. Stationary point D. None of these
3	$3x + 4 < 0$ is	A. inequality B. equation C. identity D. not inequality
4	Question Image	D. none of these
5	Question Image	
6	If (0,4) and (0,2) are vertex and focus of the parabola respectively, the the equation of the parabola is:	A. $x^2 = 4y - 32$ B. $x^2 = 8y - 32$ C. $y^3 = 16x$ D. $x^2 + 8y = 32$
7	The distance of a moving particle at any instant t is $x = 3t^2 + 1$ then velocity of particle at t = 10 is	A. 50 cm/sec B. 60 cm/sec C. 61 cm/sec D. None of these
8	The law of sines can be used to solve	A. Right angle triangle B. Isosceles triangle C. oblique triangle D. hexagon
9	Number of combination of zero or more things out of n different things	A. $nP_n$ B. $nP_r$ C. $nC_r$ D. $2^n$
10	The set of complex numbers forms a group under the binary operation of	A. Addition B. none of these C. Division D. Subtraction
11	Question Image	
12	If $A \cap B = B$ , then $n(A \cap B)$ is equal to	A. $n(a)$ B. $n(a) + n(c)$ C. $n(c)$ D. None of these
13	What is the probability of being born on Wednesday?	A. $1/7$ B. $1/2$ C. $1/3$ D. $1/8$
14	Three dice are thrown together. The probability of getting a total of at least 6 is	A. $103 / 108$ B. $10 / 216$ C. $93 / 108$ D. None of these
15	$(a^{-1})^{-1} =$	A. $a^{-1}$ B. a C. -a D. None of above
16	Range of $\tan x$ is _____	A. $[-1, -]$ B. $\mathbb{R}$ C. Negative real numbers D. $\mathbb{R} - \{x \mid -1 \leq x \leq 1\}$
17	Question Image	A. 0 B. 1

18 The circle  $(x - 2)^2 + (y + 3)^2 = 4$  is not concentric with the circle

- A.  $(x - 2)^2 + (y + 3)^2 = 9$
- B.  $(x + 2)^2 + (y - 3)^2 = 4$
- C.  $(x + 2)^2 + (y - 3)^2 = 8$
- D.  $(x - 2)^2 + (y + 3)^2 = 5$

19 

- A.  $2x + 2y$
- B.  $4 - x^2$
- C.  $-x/y$
- D.  $x/y$

20 

- A. Rational
- B. Irrational
- C. Non-real
- D. Zero