

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	One second is denoted by	A. $1^{>0</sup>}$ B. 1' C. 1" D. 1 rad
2	Two sets A and B are said to be disjoint if	
3	Question Image	A. $3 \sec^{>2</sup>x}$ B. $3 \sec^{>2</sup>3x}$ C. $\sec^{>2</sup>3x}$ D. $\sec^{>2</sup>x}$
4	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15 D. 32
5	Question Image	
6	If $f:A \rightarrow B$ is an injective function and second elements of no two of its ordered pairs are equal, then f is called	A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these
7	Find the geometric mean between 4 and 16	
8	Question Image	A. $\sec x \tan x$ B. $\cos^{>2</sup>x}$ C. $\sin^{>2</sup>x}$ D. $\sec^{>2</sup>x}$
9	The graph of linear equation $2x + 3y = 10$	A. Parabola B. Circle C. Hyperbola D. Straight line
10	If l, m, n are the d.c.'s of a line, then	A. $l^2 + m^2 + n^2 = 0$ B. $l^2 + m^2 + n^2 = 1$ C. $l + m + n = 1$ D. $l = m = n = 1$
11	What is the probability of being born on Wednesday?	A. $\frac{1}{7}$ B. $\frac{1}{2}$ C. $\frac{1}{3}$ D. $\frac{1}{8}$
12	$x^4 - 3x^3 + 3x + 1 = 0$ is called _____	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
13	The multiplicative inverse of -1 in the set $\{1-, 1\}$ is	A. 1 B. -1 C. +1 D. 0
14	$\forall a, b, c \in \mathbb{R}$ and $c > 0$ , then	A. $a > b \Rightarrow ac < bc$ B. $a > b \Rightarrow ac > bc$ C. $a < b \Rightarrow ac > bc$ D. None of these
15	If n is add the expansion $(a + x)^n$ has middle terms	A. 2 B. 3 C. 4 D. 5
16	The third term of the sequence $a_n = (-1)^{n-1}(n-7)$ is _____	A. 8 B. 4 C. -4 D. 8
17	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. ...

D. None of these

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Question Image

- A.  $-\operatorname{cosec}^2 x$   
B.  $-\sec^2 x$   
C.  $-\operatorname{cosec} x \cot x$   
D.  $\operatorname{cosec} x$

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$$i^{(4n+2)} = \text{-----}$$

- A. 1  
B. i  
C. -1  
D. -i

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The minimum value of the quadratic function  $f(x) = x^2 + 6x - 2$ , is

- A. 11  
B. 6  
C. -11  
D. 13