

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	If $f(x) = \tan x$ then $f(0)$ is	A. 0 B. 1 C. 1/2
3	If the elevation of the sun is $30^\circ$ , then the length of the shadow cast by a tower of 150 ft height is	
4	If $a \neq 0, b \neq 0$ and $ a+b = a-b $ , then vectors a and b are:	A. Parallel to each other B. Perpendicular to each other C. Inclined at $60^\circ$ D. neither parallel nor perpendicular
5	Question Image	D. all are correct
6	Question Image	A. $30^\circ$ B. $60^\circ$ C. $45^\circ$ D. None of these
7	Question Image	
8	The solution set of the equation $ 3x + 2  = 5$ is	
9	$1^0 =$ _____	A. $360'$ B. $60''$ C. $60'$ D. $3600'$
10	The greatest term in the expansion of $(3+2x)^9$ , when $x=1$ is	A. 4th B. 4th and 5th C. 5th D. 6th
11	The eccentricity of the conic $9x^2 - 16y^2 = 144$ is	A. 4/5 B. 5/4 C. 4/3 D. 3/4
12	A triangle which is not right angle is called _____ triangle	A. acute B. Obtuse C. Right D. Oblique
13	If p, q, r and in A.P., a is G.M. between p and q and b is G.M. between q and r, then $a^2, q^2, b^2$ are in	A. A.P. B. G.P. C. H.P. D. None of these
14	The second degree equation of the form $Ax^2 + By^2 + Gx + Fy + C = 0$ represent hyperbola if	A. $A = B \neq 0$ B. $A \neq B$ and both are of same sign C. $A \neq B$ both are of opposite sign D. Either $A = 0$ or $B = 0$
15	The tangents drawn from the point P to a circle are real and coincident if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
16	The fixed point from which all the points of a circle are equidistant is called the	A. chord of the circle B. centre of the circle C. diameter of the circle D. radius of the circle
17	If $\forall a, b \in R$ , then $a + b \in R$ is a property	A. Closure law of addition B. Associative law of addition C. Additive inverse D. Additive identity
18	The set $\{1, -1, i, -i\}$	A. Form a group w.r.t addition B. Form a group w.r.t multiplication C. Does not form a group w.r.t multiplication D. Form a group w.r.t addition and multiplication

D. Not closed under multiplication

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Question Image

- A. 1
- B. 0
- C. 5
- D. 2

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If a set S contains "n" elements then P (S) has ..... number of elements

- A.  $2^n$
- B.  $2^{2n}$
- C.  $2 \cdot n$
- D.  $n^2$