

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The value of x, and y, when $(x + iy)^2 = 5 + 4i$	A. $X = 2, y = -1$ B. $X = -2, y = 1$ C. $X = 2, y = -1$ D. $X = 2, y = 2$
2	Roots of the equation $2x^2 - 7x + 3 = 0$ are	A. Rational B. Irrational C. Complex D. None of these
3	The value of n, when ${}^nP_2 = 20$ is	A. 3 B. 4 C. 6 D. 5
4	Question Image	A. 1, 1/2, 0 B. 1, 2, 1 C. 1, 2, 3 D. 1, 2, 0
5	For any equilateral triangle $r : R : r_1 : r_2 : r_3 =$	A. 1:2:3:4:5 B. 1:2:3:3:3 C. 1:2:4:4:4 D. 2:1 :2 :2 :2
6	An integral of $1/x$ dx is:	A. $1/x^{>2}</sup>$ B. $1/-x^{>2}</sup>$ C. $1/\ln x$ D. $\ln x$
7	${}^nC_2$ exists when n is _____	
8	The set $\{\{a,b\}\}$ is	A. Infinite set B. Singleton set C. Two points set D. None
9	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. $\alpha + \beta + \gamma = 180^\circ$
10	Period of $\tan x$ is _____	
11	Question Image	A. $\sec 5x + c$ B. $-\sec 5x + c$
12	The proposition $S(k+1)$ is true when _____ is true $\forall K \in \mathbb{N}$	A. $S(n)$ B. $S(k)$ C. $S(1)$ D. $S(k-1)$
13	5th term of a G.P. is 2, then the product of first 9 terms is	A. 256 B. 128 C. 512 D. None of these
14	Question Image	
15	Question Image	
16	Question Image	A. 0 B. -1 C. 1 D. not defined
17	The set of complex numbers forms	A. Commutative group w.r.t addition B. Commutative group w.r.t multiplication C. Commutative group w.r.t division D. Non commutative group w.r.t addition
		A. 1

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Question Image

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

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The triangle that does not have a right angle is called.

- A. Isosceles triangle
- B. right angle triangle
- C. equivalent triangle
- D. oblique triangle

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Question Image