

## Mathematics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	In the expansion of $(a + b)^n$ in every term the sum of the exponents of a and b is	A. n B. $n + 1$ C. $2n - 1$ D. $2n + 1$
2	Question Image	
3	Question Image	
4	Which of the following is the equation of a line with slope 0 and passing through the point (4, 3)	A. $X = 4$ B. $X = -4$ C. $Y = 3$ D. $Y = -6$
5	Question Image	A. $\tan x$ B. $X$ C. $-x$
6	Question Image	D. None of these
7	The values of n such that, in the binomial expansion of $(1 - x)^n$ , co-efficient of $x^2$ , co-efficient of $x^2$ is 3, are	A. -2, -3 B. 2, -3 C. -2, 3 D. None of these
8	Question Image	
9	If the diagonal of a square has coordinates (1, 2) and (5,6) the length of a side is	A. 3 B. 4 C. 1 D. 5
10	Question Image	D. -2-i
11	In general matrices do not satisfy	A. Commutative law w.r.t multiplication B. Associative law w.r.t addition C. Distributive law w.r.t addition D. Multiplication of a scalar with the matrix
12	Question Image	A. (0, e) B. (0, 1) D. None
13	If the sum of the roots of $(a + 1)x^2 + (2a + 3)x + (3a+4) = 0$ is -1, then product of the roots is	A. 1 B. 2 C. -2 D. -1
14	The constant distance of all points of the circle from its centre is called the	A. Radius of the circle B. Secant of the circle C. Chord of the circle D. Diameter of the circle
15	The line joining (1, 3) to (a, b) has unit gradient then	A. $a - b = -2$ B. $a + b = 0$ C. $a - b + 5$ D. $2a + 3b = 1$
16	Question Image	
17	Question Image	D. None of these
18	If P(E) is the probability that an event will occur, then P(E) =	A. 1 B. 0.5 C. 2 D. 0
19	The difference of two consecutive terms of an A.P. is called	A. Constant of series B. Common ratio C. Common difference D. General term

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In 30,60,90 triangle, if the smallest side is 6 then the side opposite to the angle of  $60^\circ$  is

- A. 12
- B. 3
- D. 6