

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	C. $\ln f(x) + c$ D. $f(x) - c$
2	The transpose of a row matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
3	If $y = \sin(ax+b)$ then $y^4 =$ _____:	A. $\sin^4(ax+b)$ B. $a^4 \sin(ax+b)$ C. $a^4 \cos(ax+b)$ D. None of these
4	Question Image	A. $16/7$ B. $6/17$ C. $7/16$ D. None of these
5	Question Image	
6	The line $y = 4x + c$ touches the hyperbola $x^2 - y^2 = 1$ if	
7	Question Image	A. $a \cos(ax + b) + c$ B. $-a \cos(ax + b) + c$
8	No term of a geometric sequence can be	A. 0 B. 1 C. 2 D. 3
9	If $Z = (1,2)$ , then $Z^{-1} = ?$	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)
10	The transport of a square matrix is a	A. Row matrix B. Column matrix C. Square matrix D. Null matrix
11	The angles of elevation of the top of a tower at the top and the foot of a pole of height 10 m are $30^\circ$ and $60^\circ$ respectively. The height of the tower is	A. 10 m B. 15 m C. 20 m D. None of these
12	Question Image	D. none of these
13	AB is a vertical pole and C is its middle point. The end A is on the level ground and P is any point on the level ground other than A. the portion CB subtends an angle $\beta$ at P. If $AP : AB = 2 : 1$ then $\beta =$	
14	An observer on the top of a cliff 200 m above the sea level, observes the angles of depression of two ships on opposite sides of the cliff to be $45^\circ$ and $30^\circ$ , respectively. The distance between the ships if the line joining them points to the base of cliff is	
15	$\forall a, b, c \in \mathbb{R}$ 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
16	$\operatorname{Cosec} 60^\circ =$ _____	
17	Question Image	
18	The value of $\sin^{-1} \frac{24}{25}$ is equal to	A. $\csc^{-1} \frac{25}{24}$ B. $\sec^{-1} \frac{24}{25}$ C. $2 \tan^{-1} \frac{4}{5}$ D. $2 \cos^{-1} \frac{24}{25}$
19	The expression $x^2 - x + 1$ has	A. One proper linear factor B. No proper linear factor C. Two proper linear factors D. ...

D. None of these

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Every irrational number is

- A. A real number
- B. A prime number
- C. A natural number
- D. An integer