

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The locus of the centre of a circle which touches two given circles externally is:	A. a hyperbola B. an ellipse C. a circle D. a parabola
2	If $A = [a_{ij}]_{m \times p}$ and $B = [a_{ij}]_{p \times n}$ then order of $BA$ is	A. $m \times n$ B. $p \times n$ C. $n \times m$ D. None of these
3	The slope of y-axis is	A. 0 B. undefined C. 1
4	Question Image	B. 0 C. 1 D. undefined
5	$\sin^2 \alpha \cos^2 \alpha =$	A. -1 B. 0 C. 1 D. None of these
6	The approximate increase in the area of a circular disc if its diameter increased from 44cm to 44.4cm is	A. 0.4cm B. $8.8\pi$ cm C. $17.6\pi$ cm D. $35.2\pi$ cm
7	Period of $2 \cos x$ is _____	
8	Question Image	
9	The fifth term of an A.P. Whose first term is 5 and common difference is 3, is	A. 20 B. 17 C. 25 D. 30
10	Question Image	A. Associative property of addition B. Associative property of multiplication C. Commutative property of addition D. Commutative property of multiplication
11	Question Image	
12	Question Image	
13	The principal value of $\sin^{-1}(-1/2)$	A. $\pi/3$ B. $\pi/4$ C. $\pi/6$ D. $-\pi/6$
14	$\sqrt{-1} b =$	A. b B. 2 C. 2b D. None of these
15	p, q, r and s are integers. If the A.M. of the roots of $x^2 - px + q^2 = 0$ and G.M. of the roots of $x^2 - rx + s^2 = 0$ are equal, then	A. q is an odd integer B. r is an even integer C. p is an even integer D. s is an odd integer
16	Question Image	
17	If $A=B$ , then	A. $A \subset B$ and $B \subset A$ B. $A \subseteq B$ and $B \not\subseteq A$ C. $A \subseteq B$ and $B \subseteq A$ D. None of these
18	The process of finding a function whose derivative is given is called a	A. Differentiation B. Integration C. Differential D. ...

D. None

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Question Image

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$\forall a, b, c \in \mathbb{R}, a > b \wedge b > c \Rightarrow a > c$  is

- A. Trichotomy property
- B. Transitive property
- C. Symmetric property
- D. Additive property