

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	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
2	The expansion $(1 + x)^{-3}$ holds when	A. $ x > 1$ B. $ x < 1$ C. $x < 1$ D. $x > 1$
3	In order of A is $m \times n$ and order of B is $n \times p$ then order of AB is	A. $m \times m$ B. $n \times n$ C. $m \times p$ D. $p \times m$
4	The $\sqrt{\quad}$ is used for the	A. Positive square root B. Negative square root C. +ve and -ve square root D. Whole number
5	Question Image <input type="text"/>	
6	Question Image <input type="text"/>	A. a^x B. $a^{\ln x}$
7	A person standing on the bank of a river observes that the angle of elevation of the top of a tree on the opposite bank of the river is 60° and when he retires 40 meters away from the tree the angle of elevation becomes 30° . The breadth of the river is	A. 40 m B. 30 m C. 20 m D. 60 m
8	In the expansion of $(a + x)^n$ the general term T_{r+1} is	
9	If m and n be two scalars, then $(m+n)^g =$	A. 0 B. $m+n$ C. $m_a + n_a$ D. $m_a - m_a$
10	When the angle between the ground and the sun is 30° , flag pole casts a shadow of 40 m long. the height of the top of the flag is	A. 25m B. 23m C. 12m D. 29m
11	Question Image <input type="text"/>	
12	The roots of $px^2 - (p-q)x - q = 0$ are	A. equal B. Irrational C. Rational D. Imaginary
13	With usual notations $b^2 = a^2 + c^2 - 2ac \cos$ is called _____;	A. None of these B. Law of sines C. Law of cosines D. Law of tangents
14	Question Image <input type="text"/>	
15	$\cos 60^\circ =$ _____	A. 1 B. 2 C. 1/2 D. 3
16	The set $\{Z \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
17	Question Image <input type="text"/>	A. $y + 1 = Ae^x$ B. $y + 1 = Axe^x$ C. $xe^x = C$

$$D. y + x^{\sup}x^{\inf} = C$$

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19 The maximum value of the quadratic function $f(x) = 2x^2 - 4x + 7$, is

- A. 3
- B. 5
- C. -3
- D. -5

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- A. Even
- B. Odd
- C. Prime
- D. None of these