

## PPSC Economics Topic 13 Mathematics in Economics

Sr	Questions	Answers Choice
1	A mathematical statement setting two algebraic expressions equal to each other is called.	A. Equations B. Hypothesis C. Inequality D. All of above
2	The transpose of the cofactor matrix is called.	A. Adjoin of the matrix B. Power of a matrix C. Minor of the matrix D. Rank of a matrix
3	If we are told that the two statements $y = 3x^2$ and $y = x + 10$ are both true at the same time, they are called.	A. Implicit functions B. explicit functions C. Simultaneous equations D. Quadratic equations
4	A determinant composed of all the first order partial derivatives of a system of equations, arranged in ordered sequence is called.	A. Hessian determinant B. Jacobian determinant C. Discriminant D. First order determinant
5	If a Set C contains all the elements which are present in both the set A and B then set C is called.	A. Union of A and B B. Intersection of A and B C. Complement of A D. Complement of B
6	If matrix A is matrix of order $n \times m$ and B is another matrix of order $m \times n$ , then BA will be the matrix of order.	A. $n \times m$ B. $m \times n$ C. $n \times n$ D. $m \times m$
7	The function $y = 2x + 1$ and $x = \frac{1}{2}y - \frac{1}{2}$ are said to be.	A. Non linear functions B. Inverse functions C. Step functions D. All the above
8	The set of 'stars in the sky' is an example of	A. Countable set B. Infinite set C. Finite set D. unit set
9	any number raised to the power zero is always equal to.	A. zero B. one C. two D. The number itself
10	A set containing no elements is called.	A. Null set B. empty set C. void set D. all of the above
11	A matrix with all elements zero other than all the diagonals is called.	A. Diagonal matrix B. Orthogonal matrix C. Unit matrix D. Column vector
12	A function where a variable x can only vary in jumps, is often called.	A. Non linear functions B. Inverse function C. Step function D. All of above
13	A square matrix A such that $A^2 = A$ is called.	A. Orthogonal matrix B. Skew symmetric matrix C. Idempotent matrix D. Singular matrix
14	If all the elements of a matrix of any order are zero, it is called.	A. Identity matrix B. Null matrix C. Zero matrix D. Both b and c
15	The set which contains all the elements of the two given sets A and B, avoiding duplication, is called.	A. Intersection of A and B B. Union of A and B C. Set A and B D. None of these

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16	The slope of a horizontal line is.	A. One B. Zero C. Three D. two
17	A square matrix with 1's in its principal diagonal and zeros every where else is.	A. Diagonal matrix B. Identity matrix C. Leading diagonal D. Scalar matrix
18	if in a matrix , the number if rows is the same as the number of columns, it is called.	A. Singular matrix B. Non singular matrix C. Square matrix D. Column vector
19	Union of A with A, that is A U A.	A. Complement of A B. A itself C. Con not be determined D. None of these
20	A square matrix a of order 'n' is called a diagonal matrix if its non diagonal elements are.	A. zero B. Non zero C. One D. None of the above

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