

PPSC Economics Topic 13 Mathematics in Economics

| Sr | Questions | Answers Choice |
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| 1 | A set containing only one element is termed as | A. Unit set B. Singleton set C. Both a and b D. None of these |
| 2 | $AB = BA = 1$, then B is said to | A. Ad joint of matrix of A B. Inverse matrix of A C. Determinant of A D. Cofactor of a |
| 3 | The objects constituting a set are called | A. Estimates B. Elements C. Set object D. Noe of these |
| 4 | The equilibrium price and quantity , given the inverse demand and supply functions. $p_o = 3q + 30$ and $p_s = 2q - 5$ | A. $p = 9$ and $q = 7$ B. $p = 10$ and $q = 7$ C. $p = 9$ and $q = 8$ D. $p = 7$ and $q = 9$ |
| 5 | The set of all elements belonging to A but not to B is. | A. $B - A$ B. $A - B$ C. A' D. B' |
| 6 | If the columns of a given matrix A and B are changed into rows and vice versa, the matrix thus obtained is called the. | A. Symmetric matrix B. Transpose of a matrix C. Singular matrix D. Rank of matrix |
| 7 | The determinant of quadratic form is called. | A. Jacobian determinant B. Hessian determinant C. Discriminant D. None of these |
| 8 | "No two elements of a set are identical" this statements is. | A. Always true B. Sometimes true C. Not true D. All of the above is possible |
| 9 | A diagonal matrix whose diagonal elements are equal is called. | A. Unit matrix B. Singular matrix C. Scalar matrix D. Non singular matrix |
| 10 | If two sets contain the same distinct elements, then they are called. | A. Equal sets B. Unequal sets C. Equivalent sets D. All of the above |
| 11 | Union of A and the universal set is | A. A B. A' C. Universal set D. None of these |
| 12 | if we are told that the two statements $y = 3x^2$ and $y = x + 10$ are bout true at the same time , they are called. | A. Implicit functions B. explicit functions C. Simultaneous equations D. Quadratic equations |
| 13 | A positive definite Hessian fulfills the second order conditions for | A. Maximum B. Minimum C. Both maximum and minimum D. Mini max |
| 14 | 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. $m \times m$ |
| 15 | if $A = A$, then A is | A. Symmetric matrix B. Skew symmetric matrix C. Identity matrix D. Orthogonal matrix |

16 A linear function of the form $6x^2 - 2y + 8 = 0$ is known as.

A. Explicit function
B. **implicit function**
C. Quadratic function
D. All of the above

17 If B is a subset of A, then $A \cup B =$

A. B
B. Intersection of A and B
C. **A**
D. None of these

18 Matrix multiplication does not satisfy

A. Associative law
B. Distributive law
C. **Commutative law**
D. None of the above

19 The sufficient condition required for the matrix to posses inverse is that the matrix should be.

A. square matrix
B. Singular matrix
C. **Non singular matrix**
D. Orthogonal matrix

20 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
