

PPSC Economics Topic 13 Mathematics in Economics

Sr	Questions	Answers Choice
1	Who is regarded as the founder of theory of sets.	A. Adam Smith B. Karl Frederich Gauss C. George cantor D. Euler
2	A determinant compose of all the second order partial derivatives, with the second order direct partials on the principal diagonal and the second order cross partials off the principal diagonal and which is used to second order condition of optimization is called.	A. Jacobian determinant B. Hessian determinant C. Discriminant D. None of these
3	A determinant composed of all the first order partial derivatives of a system of equations, arranged in ordered sequence is called.	A. Hessian determinatn B. Jacobian determiniant C. Discrimianant D. First order determinant
4	Collection of well defined distinct objects thought of as a whole is called	A. Union B. Derivative C. Set D. Integral
5	The slope of a horizontal line is.	A. One B. Zero C. Three D. two
6	A square matrix a such that $A^2 = a$ is called.	A. Orthogonal matrix B. Skew symmetric matrix C. Idempotent matrix D. Singular matrix
7	If a Set C contain 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
8	A polynomial equation with degree two a called.	A. Linear equation B. Quadratic equation C. Parabola equation D. All of the above
9	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
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	The simplest form of rectangular hyperbola is	A. $y = 1/x$ B. $y = x^2$ C. $y = x-2$ D. $y = x^3$
12	Unknown values in an equation are called.	A. Constants B. Numeraire C. Variables D. All of the above
13	Union of A and a null set is equal is.	A. Intersection of A and null set B. Null set C. Both a and b D. A
14	A mathematical statement setting two algebraic expressions equal to each other is called.	A. Equations B. Hypothesis C. Inequality D. All of above
15	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

16	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
17	If matrix A is of $m \times n$ dimension, then A will be	A. $n \times m$ dimension B. $m \times n$ dimension C. $n \times p$ dimension D. $m \times m$ dimension
18	The set which contains all the element 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
19	If each element of a raw or column is a sum of two elements, the determinant can be expressed as the	A. Sun of two determinants B. Difference of two determinants C. Multiplication of two determinants D. Division of two determinants
20	A set containing all the elements of the universal set except those of set A is called.	A. Complement of set A B. Complement of universal set C. Union of A and universals set D. Universal set itself