

Class : I PG
Major : Economics

Time: 3 hours
Max. Marks: 60

17MECCO3 Mathematical Methods

Part A

10 x 1/2 = 5

Choose the correct answer

- Given $y = 2x + 3$, dy / dx is equal to
a.3 b.2 c.0 d.-1
- Elasticity of demand
a. $e = AR / (AR-MR)$ b. $e = MR-AR$ c. $e = AR / MR$ d. $e = (AR-MR) / AR$
- Euler's theorem
a. $x \frac{du}{dx} + y \frac{du}{dy} = hu$ b. $x \frac{\partial u}{\partial x} + y \frac{\partial u}{\partial y} = u$
c. $x \frac{du}{dx} + \frac{du}{dy} = hu$ d. $\frac{du}{dx} + \frac{du}{dy} = u$
- Derivative of a constant is
a.0 b.1 c.x d.-1
- Partial derivative of u with respect to x is denoted by
a. dy / dx b. $\partial x / \partial u$ c. du / dx d. $\partial u / \partial x$
- $\int x^5 dx$
a. $\frac{x^5}{6} + c$ b. $x^4 + c$ c. $x^3 + c$ d. $\frac{x^5}{5} + c$
- Unit matrix of order 2
a. $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$ b. $\begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \end{bmatrix}$
c. $\begin{bmatrix} 1 & 0 & 0 \end{bmatrix}$ d. $\begin{bmatrix} 1 & 0 \end{bmatrix}$
- The inverse of a matrix is
a. Adj A b. $|A| / \text{Adj A}$
c. $\text{Adj A} / |A|$ d. $\text{Adj A} * |A|$
- Who developed linear programming technique?
a. George.B.Dantzig b. Samuelson
c. Hicks d. Domar
- Cobb Douglas production function is a homogeneous function of degree
a.1 b.2
c.0 d.3

