

**UG 3rd Semester Examination 2021**  
**Economics (Honours)**  
**Paper: DC - 5**

**Full Marks: 32**

**Time: 2 hours**

**Group A**

**Answer any *four* questions:**

**2 x 4 = 8**

1. State the Weak Axiom of Revealed Preference Theory.
2. Define: Homogenous Production Function.
3. State two different properties of a Cobb-Douglas Utility Function.
4. Under what conditions the long-run average cost curve is a straight line parallel to the horizontal axis?
5. Define: Price Consumption Curve.
6. Draw an Engel curve from Income Consumption Curve.

**Group B**

**Answer any *four* questions:**

**4 x 4 = 16**

7. Why the LAC curve is called a Planning Curve?
8. Show that a CES production function tends to Cobb-Douglas production function when the substitution parameter tends to zero.
9. Why does the MC curve intersect the AC curve at its lowest point?
10. Explain the Slutsky method of Substitution Effect.
11. Show that for a homogenous production function the elasticity of output is the sum total of the input elasticities of output.
12. Why is the upward sloping MC curve from shut down point called the Short run supply curve of the perfectly competitive market?
13. What are the different assumptions of marginal productivity theory of distribution.

14. A consumer buys  $X_1 = 20$  &  $X_2 = 50$  at price  $P_1 = 5$  and  $P_2 = 5$ . He also buys  $X_1 = 10$  and  $X_2 = 70$  at price  $P_1 = 4$  and  $P_2 = 3$ . Is the consumer's choice consistent?

**Group C**

**Answer any one question:**

**8 x 1 = 8**

15. Assuming a perfectly competitive factor and commodity market, show (with the help of a diagram) that, the demand curve for a single variable factor – labour is its VMP curve.

8

16. What is MRTS? Prove that the expansion path of a Cobb-Douglas production function is a linear one.

2 + 6