



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY

Question Paper

B.Sc. Honours Examinations 2021

(Under CBCS Pattern)

Semester - III

Subject: ECONOMICS

Paper: C 5-T

(Intermediate Microeconomics-I)

Full Marks : 60

Time : 3 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group - A

Answer any *four* questions :

12×4=48

1. State the basic assumptions of the indifference curve analysis and show what assumptions are to be violated to obtain (a) linear and (b) L-shaped indifference curves ? 6+3+3
2. Distinguish between the Hicks approach and Slutsky approach to the substitution effect of a change in relative price of a commodity. Show that the price effect is the result of income effect and substitution effect. 6+6

3. What is a CES production function ? Show that under some special conditions the constant elasticity substitution (CES) production function may converge to the Cobb-Douglas production function. 2+10
4. Write down the equation of an isocost line and derive its slope. What happens to the slope of the isocost line if additional incentive of amount 'a' is paid to each unit of labour without any change in the price of capital ? Using a fixed isocost line, show how a producer maximizes output level in an optimum manner. 2+4+6
5. Examine the relationship between AC, AVC and MC curves. Show that the long run average cost (LAC) curve is the 'envelope' of all short run average cost (SAC) curves. 6+6
6. What is an industry supply curve ? Derive the long run supply curve of the perfectly competitive industry (LRISC) under constant cost condition. 4+8
7. State and prove the Product Exhaustion Theorem. Is the assumption of constant returns to scale in the entire production system necessary to prove the theorem ? Explain. 6+6
8. Distinguish between value of marginal product (VMP) and marginal revenue product (MRP) of labour. Explain how the labour demand function is determined in a competitive industry. 4+8

Group - B

9. Answer any **six** questions from the following : 2×6=12
 - (a) Distinguish between 'cardinal utility' and 'ordinal utility' ? What is meant by negative marginal utility ?
 - (b) What is an 'indirect utility function' ? Explain.
 - (c) Mention briefly the 'Law of Diminishing Marginal Rate of Substitution'.
 - (d) Is it true that existence of CRS in the total production system necessarily requires the returns to the individual factors to be diminishing ? Briefly explain.

- (e) Define elasticity of factor substitution and write down its mathematical expression.
- (f) A production function is given as $Q = AK^\beta L^\theta$. Interpret the constants β and θ .
- (g) Draw the equilibrium of a competitive firm when it faces loss and show the area of loss.
- (h) Which point is known as 'Break-even Point' in Economics and why ?
- (i) Mention two major assumptions for a perfectly competitive market.
- (j) Define an 'expansion path' with its equation as applied in production process.
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