

Undergraduate 2<sup>nd</sup> Semester Examination-2021

ECONOMICS

Course Coder-SH/ECO/201-C-3

Course Title- Intermediate Microeconomics-I

Course ID-21611

Time-2 Hours

Full Marks-40

**1. Answer any five of the following questions:**

**2x5=10**

- a) Define normal and inferior good.
- b) Define Substitute and Complementary goods.
- c) Derive the relationship among AR, MR and price elasticity of demand.
- d) If  $MU_x / MU_y$  is constant, what will be the shape of indifference curve?
- e) What is expansion path? Write down the equation of expansion path.
- f) Show that if AC rises, then  $MC > AC$ .
- g) What do you mean by Law of variable proportion?
- h) What is product exhaustion theorem?

**2. Answer any four of the following questions:**

**4x5=20**

- a) Prove any two properties of Indifference curve.
- b) What is substitution effect? Explain the difference between Hicks and Slutsky's substitution effect. (2+3)
- c) Derive the demand curve under Revealed Preference Theory.
- d) Establish the relationship between price elasticity and total expenditure.
- e) Show how long run average cost curve can be derived from short run average cost curve.
- f) Explain the short run equilibrium of a competitive firm.

**3. Answer any one of the following questions:**

**1x10=10**

- a) State and explain the assumptions of Marshallian demand theory. Derive the concept of equi-marginal utility in terms of this theory. (6+4)

b) What do you mean by 'Homogeneous' production function? Explain the properties of Cobb-Douglas production function. (2+8)