Indian Institute of Technology Patna

HS201 Introductory Microeconomics

Mid Semester Examination 2011

Total Marks: 30 **Time: 2 Hours**

Answer all the questions

Part I: Short Answer

1. Read the statement and explain the statement if it is true or false . A firm's marginal rate of technical substitution captures the firm's willingness to trade capital for labor, but not the degree to which capital and labor are substitutes in the production process. **(7 Marks)**
2. An high-definition flat screen TV sold 500,000 units at £1000 each last year. It is known that its price elasticity of demand is -2.0 (calculated at the current price and quantity). What would sales be this year if there are no other changes affecting demand and the price per unit is lowered to £950?. **(1 Mark)**

a. 450,000
b. 525,000
c. 537,500
d. 550,000
e. 600,000

3. The price of a product rises from £100 to £110 and the quantity demanded falls from 100 to 99. Which one of the following is a true statement about the value of demand elasticity (as measured at the initial price and quantity): **(1 Mark)**

a. Elasticity is -10.
b. Elasticity is -10.
c. Elasticity is -1
d. Demand is elastic
e. You cannot calculate elasticity from this information

4. If a 12% fall in price leads to a 3% increase in quantity demanded: **(1 Mark)**

a. Elasticity of demand is equal to -0.5.
b. Elasticity of demand is equal to -4.
c. Elasticity of demand is equal to -0.25.
d. Elasticity of demand is equal to -2.5.
e. Elasticity of demand is equal to -0.4.

Part II: Long Answer

5. Discuss the properties of an Indifference Curve. What is Budget Line? With the help of the diagram discuss how a consumer gets the higher level of satisfaction when consumers' budget is limited. **(10 Marks)**

6. What makes the difference between Cardinal and Ordinal utility? What Determines Price Elasticity of Demand? **(5 + 5 = 10 Marks)**