Answer all Questions

Time 3 Hours

1. i. Briefly explain what an indifference curve is, and how it can be graphically derived. (04 Marks)

   ii. Suppose that a consumer spends all her income on food and clothing at the current prices of food and clothes are Rs. 10 and Rs. 5 respectively. If she maximizes her utility by purchasing 20 units of food and 50 units of clothing, Find the followings: (06 Marks)

      a. What's the consumer income?

      b. What is the marginal rate of substitution of food for clothing at the equilibrium level?

   iii. Can indifference curves cross each other? Why? (Give graphical explanation). (04 Marks)

   iv. Using hypothetical information explain the equilibrium under indifference curve analysis (06 Marks)

   (Total Marks 20)

2. i. Distinguish between the movement along the demand curve and a shift in the demand curve. (04 Marks)

   ii. Using diagram explain the income effect and substitution effect. (08 Marks)

   iii. $Q_D = 100 - 4P$

   $Q_S = -12 + 24P$ (08 Marks)

   Using the above information, Find the following

      a. Equilibrium price and quantity.

      b. Consumer surplus and producer surplus.

   (Total Marks 20)

3. i.   The price elasticity of demand for color TV is estimated to be   (04 Marks)
          − 2.5. If the price of color TV is reduced by 20 percent, how
          much of percentage increase would be a in the quantity of color
          TV?

    ii.   A Company has an assembly line of fixed size A. Total output is
          a function of the number of workers as shown in the following
          schedule:

No. of Workers (L)	Total Output (Q)
0	0
1	10
2	30
3	50
4	56
5	59
6	60
7	60
8	58

(a) Determine schedules for marginal productivity of labor and   (04 Marks)
average productivity of labor.

(b) Determine the range of employment that show the three   (04 Marks)
stages of production

(c) Indicate the level of employment at which the law of   (04 Marks)
diminishing returns first occurs.

(d) Suppose the market price of the output Rs.15 and the wage   (04 Marks)
rate is Rs.90, how many workers would this firm hire? What if
the market price decreases to Rs.10?

                                                              (Total Marks 20)

4. i.   Explain how the long – run envelope cost curve is derived from   (05 Marks)
          short run short run average cost curve.

    ii.   How is the law of diminishing returns reflected in the shape of the   (05 Marks)
          total production curve?

    iii. Differentiate between Iso- quant curve and Iso - cost curve.   (05 Marks)

iv. What is ridge line? Explain the economic region of production in   (05 Marks)
    Iso- quant map.

                                                                    (Total Marks 20)

5. i.   Briefly explain the key characteristics of perfect competition   (05 Marks)
        market with example.

   ii. Can a firm under perfect condition operate in the short run when   (05 Marks)
        it is making losses? Explain.

   iii. What are external economies and diseconomies?   (05 Marks)

   iv. Suppose that the total cost function for a firm is given by,   (05 Marks)
        $TC = 500 + 10Q^2$

        Let the demand equation be given by, $P = 200-10Q$

           (a) What is profit maximizing price and quantity?
           (b) Calculate the total profit for the firm.

                                                                    (Total Marks 20)