2023

Time - 3 hours

Full Marks - 80

*Answer **all groups** as per instructions.*

Figures in the right hand margin indicate marks.

GROUP – A

1. Fill in the blanks. (<u>all</u>)   [1 × 12

   (a) The ratio between change in the quantities of goods-Y and change in the quantity of goods-X is known as _____.

   (b) Indifference curves are right-angled in case of _____.

   (c) If X and Y are two goods and M is money income the general equation of the budget line is _____.

   (d) If x_1, x_2, x_3 ...., x_n are n-number of goods, then the first order condition of utility maximisation is _____.

   (e) Indirect utility function takes into account _____ of a consumer which direct utility function ignores.

   (f) Law of variable proportion is a _____ production function.

   (g) At the end of Stage-II of the law of variable proportion, $MP =$ _____.

P.T.O.

(h) CES production function is homogeneous of degree _____.

(i) In Cobb-Douglas production function, if $\alpha + \beta = 1$, then there is _____ returns to scale.

(j) The conditions for least cost combination of a firm are _____ and _____.

(k) When marginal revenue is negative, total revenue _____.

(l) The first order condition of profit maximization is _____.

GROUP – B

2. Answer any eight of the following questions within two to three sentences each.

[2 × 8

(a) What is the axim of transitivity ?

(b) What is income consumption curve ?

(c) What is indirect utility function ?

(d) What is expenditure function ?

(e) What is point of inflexion ?

(f) What is meant by internal economies ?

(g) What is MRTS ?

(h) What is expansion path ?

(i) What is cost function ?

(j) What are the conditions for equilibrium of a firm ?

GROUP – C

3. Write notes on any eight of the following within 75 words each.

[3 × 8

(a) Budget constraint

(b) Hicksian consumer's surplus

(c) Backward Sloping Price Consumption Curve

(d) Hicksian substitution effect

(e) Point elasticity of demand

(f) Increasing returns to scale

(g) Cobb-Douglas production function

(h) U-shape of short-run average cost curve

(i) Conditions for cost minimization

(j) Input demand

GROUP – D

Answer all questions within 500 words each.

4. Explain with diagram some exceptional shapes of indifference curve.

[7

OR

Explain the utility Maximization conditions in the n-goods case.

5. Explain with diagram, the concept of compensated demand curve
    and state how it differs from ordinary demand curve.   [7

OR

Explain Hicksian method of decomposition of price effect into in-
come effect and substitution effect.

6. Explain the cost minimizing input choice both mathematically and
    with the help of diagram.   [7

OR

Explain the law of variable proportion with the help of diagram.

7. Explain with the help of diagram, the general conditions of profit
    maximization of a firm.   [7

OR

Discuss the relationship between AR, MR and elasticity of de-
mand.