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1 SEM TDC ECO M 1

2017

(November)

ECONOMICS

(Major)

Course : 101

(Microeconomics—I)

Full Marks : 80

Pass Marks : 32/24

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following as directed : 1×8=8

(a) The total expenditure (TE) does not change with change in price, when

(i) Ed < 1

(ii) Ed > 1

(iii) Ed = 1

(iv) None of the above

(Choose the correct option)

(b) How does the imposition of a unit tax affect the supply curve of a firm?

(c) Find consumer's marginal rate of substitution (MRS) of food for clothing at the equilibrium position, when $P_f = 10$ and $P_c = 5$.

(d) The quantity demanded of a Giffen good varies _____ with price.

(i) indirectly

(ii) directly

(iii) independently

(iv) All of the above

(Fill in the blank)

(e) A firm will be in equilibrium regarding use of a factor combination when marginal rate of technical substitution (MRTS) between factors is _____ to the ratio of factor prices.

(i) less than

(ii) more than

(iii) equal

(iv) independent

(Fill in the blank)

(f) Find the marginal product of capital (MP_k) when marginal product of labour is 5 and marginal rate of technical substitution of labour for capital is 2.

(g) What does the area under the marginal cost (MC) curve show?

(i) TFC

(ii) TVC

(iii) AFC

(iv) AVC

(Choose the correct option)

(h) Find the total fixed cost (TFC) from the total cost function

$$TC = 100 + 50Q - 12Q^2 + Q^3,$$

where TC is total cost and Q is level of output.

2. Write short notes on any *four* of the following (**within 150 words** each) : 4×4=16

(a) Scope of microeconomics

(b) Relationship between marginal utility and total utility with the help of schedule and diagram

(c) Derivation of Engel curve from income consumption curve for necessaries

(d) Ridge lines

(e) Envelope curve

Answer the following questions (**within 500 words** each) :

3. (a) Explain with the help of diagrams, the effects of the following changes on the demand of a commodity : 4+4+4=12

(i) Change in the income of consumer

(ii) Unfavourable change in the taste of buyer of the commodity

(iii) Change in prices of related goods

Or

(b) (i) Discuss the various factors that affect price elasticity of demand.

(ii) The demand for goods x and y have equal price elasticity. The demand of x rises from 100 units to 250 units due to a 20 percent fall in its price. Calculate the percentage rise in demand of y, if its price falls by 8 percent.

6+6=12

4. (a) Deduce the inverse relationship between the quantity demanded of a commodity and its price in terms of Marshallian analysis. How would you explain, in terms of this analysis, the phenomenon that a fall in price of salt does not make a consumer buy more of it?

8+3=11

Or

(b) Explain consumer's equilibrium condition with the help of indifference curve approach. How will a change in consumer's income affect his equilibrium?

8+3=11

5. (a) Using indifference curve analysis, show how price effect of a commodity is decomposed into income effect and substitution effect.

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Or

(b) What is income consumption curve? Draw indifference curve diagrams showing the income consumption curve in the following cases :

(i) Both x and y are normal goods.

(ii) Good x is normal good and good y is inferior good.

(iii) Good x is inferior good and good y is normal good. 2+3+3+3=

6. (a) What are the three stages of short-run production function? Why does it not make any economic sense to produce in stage I or stage III? 6+5=

Or

(b) Define isoquant and isocost. Show how these tools can be used in determining the optimal factor combination of a firm for a given level of output. 4+7=

7. (a) What is internal economies and internal diseconomies of large-scale production? Explain the various economies and diseconomies of scale that accrue to the firm when it expands its scale of production. 2+9=

Or

(b) Explain with illustrations the following concepts of costs :

(i) Average Fixed Cost (AFC)

(ii) Average Variable Cost (AVC)

(iii) Average Total Cost (ATC)

(iv) Marginal Cost (MC)

Why does ATC curve reach its lowest point after AVC curve? 2+2+2+2+3=11

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