BUSINESS ECONOMICS- I

New Syllabus - 2070

Course No.: MGT203 | **Full Marks: 100**
Nature of the Course: Compulsory | **Pass Marks: 35**
Lecture hours: 150

Course Objectives

This course of Business Economics-I aims to enhance understanding of the microeconomic theories and develop skills of students in using these theories in business decision making.

Course Description

This course of Business Economics-I consists of the introduction to microeconomics, theory of demand, supply and equilibrium price, elasticity of demand and supply, theory of consumers behavior, theory of production, cost and revenue curves, theory of product pricing and factor pricing.

Contents

Unit 1: Introduction **LH 5**

• Concept of business (managerial) economics, • Relation of business economics with traditional economics • Meaning, scope, use and limitations of microeconomics

Unit 2: Theory of Demand and Supply and Equilibrium Price **LH 20**

• Demand function, determinants of demand, movement and shift in demand curve • Supply function, determinants of supply, movement and shift in supply curve • Market equilibrium • Change in equilibrium due to shift in demand curve and supply curve (Numerical exercise)

Unit 3: Elasticity of demand and supply **LH 20**

• Concept and types of price, income and cross elasticity of demand • Measurement of price, income and cross elasticity of demand: Total outlay, point and arc method • Uses of price, income and cross elasticity • Concept of elasticity of supply • Measurement of elasticity of supply (Numerical exercise)

Unit 4: Theory of Consumer Behavior **LH 20**

• Concept of cardinal and ordinal utility analysis • Cardinal approach: Assumptions, consumer's equilibrium, criticisms and derivation of demand curve (cardinal approach) • Ordinal approach: Indifference curve: Concept, properties, marginal rate of substitution, price line and consumer's equilibrium • Price effect: Derivation of PCC • Income effect: Derivation of ICC • Substitution effect: Hicksian approach • Decomposition of price effect into income and substitution effect: Hicksian approach • Derivation of demand curve: (ordinal approach) (Numerical exercise)

Unit 5: Theory of Production **LH 16**

• Production function: Meaning, long run and short run production function and concept of Cobb-Douglas production function • Concept of total product, average and marginal product • Law of variable proportions • Isoquant: Meaning and properties • Marginal rate of technical substitution • Iso-cost curve • Optimal combination of inputs • Laws of return to scale (Numerical exercise)

Unit 6: Cost and Revenue Curves **LH 17**

• Concept of cost: Actual cost and opportunity cost, implicit cost and explicit cost, accounting and economic cost, historical cost and replacement cost, separable cost and common cost • Derivation of short run cost curves • Reason for the 'U' shape of short run average cost curve • Derivation of long run cost curves • Relationship between short run and long run AC and MC curve • Shape of the long run average cost curve: Theoretical reason and empirical evidence • Concept of economies of scale and economies of scope • Concept of revenue: Total revenue, average revenue, and marginal revenue. Revenue curves under perfect and imperfect competition • Relation between average and marginal revenue curves • Relationship between price elasticity and marginal revenue and total revenue

(Numerical exercise)

Unit 7: Theory of Product Pricing **LH 30**

- **Perfect competition:** Meaning and characteristic of perfect competition; Pricing under perfect competition: Equilibrium of firm and industry in short run and long run (TR-TC approach and MC-MR approach); Derivation of short run and long run supply curve of a firm and industry
- **Monopoly:** Meaning and characteristic of monopoly; Pricing under monopoly: Equilibrium of firm in short run and long run (TR-TC approach and MC-MR approach); Price discrimination: Degree of price discrimination and price and output determination under discrimination; Dumping
- **Monopolistic competition:** Meaning and characteristics of monopolistic competition; Pricing under monopolistic competition: equilibrium of firm in short run and long run; equilibrium of firm under product variation and selling expenses
- **Oligopoly:** Meaning and characteristic of oligopoly; Pricing under cartel (aiming at joint profit maximization)

(Numerical exercise)

Unit 8: Theory of Factor Pricing **LH 22**

• Pricing of inputs in perfect competition and imperfect competition market • **Rent:** Modern theory of rent • **Wages:** Marginal productivity theory of wages, Concept of collective bargaining and minimum wages fixation, • **Interest:** Loanable fund theory and Liquidity Preference Theory of interest • **Profit:** Economic and Business Profit, Dynamic Theory and Innovation Theory of Profit (Numerical exercise)

Basic Books

Salvatore, Dominic. (2009). ***Principles of Microeconomics.*** Publish in India Oxford University Press, New Delhi

Pindyck, Robort S. and Daniel, Rubinfield. (2001). ***Microeconomics***. New Delhi: Prentice Hall of India

Mankiw, N. Gregory. (2009). ***Principles of Microeconomics.*** Centage Learning India Private Limited, New Delhi (4th edition)

Gilespi, Andrew. (2010). ***Business Economics:*** Oxford University Press

Koutsoyianis, A. (1991). ***Modern Microeconomics***. Hongkong: ELBS

Reference Books

Joshi, Shyam. (2012). ***Business Economics.*** Kathmandu: Taleju Prakashan

Dwibedi, D.N. (2001). ***Microeconomic Theory and Application.*** Tata McGraw-Hill Publishing Company Limited, New Delhi

Ahuja, H.L. (2004). ***Advance Economic Theory***. New Delhi: S. Chand and Company

Gould, J.P. and E.P. Lazer. (2003). ***Microeconomic Theory.*** New Delhi: All India Travelers Book Sellers

Browning, E.K. and Browning, J.M. (2001). ***Microeconomic Theory and Application***. New Delhi: Kalyani Publishers

New Model Questions- 2070

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt All Questions:

Group 'A'

Brief Answer Questions **[2 x 10 = 20]**

1. Define Micro Economics.
2. What is the difference between movement along a demand curve and shirt in demand curve?
3. As a result of 5% fall in price of food its demand rises by 12%. Find out price elasticity of demand say whether demand is elastic or inelastic.

   Ans: E_p= 2.4; relatively elastic demand
4. Why indifference curve is convex to the origin?
5. Why AR and MR curve is horizontal straight line in perfect competition market?
6. Draw the diagram of iso-cost line.
7. What is opportunity cost?
8. If Q_d = 100-20p and Qs = 10 + 40p. Find the equilibrium level of price and output.

   Ans: Rs. 1.5 and 70 units
9. Define transfer earning with an example.
10. What is oligopoly market?

Group 'B'

Descriptive Answer Questions (attempt any five) **[5 x 10 = 50]**

11. What is price effect? Describe how consumer equilibrium changes due to the changes in the price of a commodity.
12. Explain the uses of microeconomics in making business decision.
13. Derive short-run supply curve of a firm and industry under perfect competition.
14. Complete the following table and answer the given question.

Output	TFC	TVC	TC	AFC	AVC	AC	MC
0	200						
1		50					
2		90					
3		120					
4		140					
5		175					
6		230					
7		310					
8		400					

From the given table, explain the relationship between average cost and marginal cost.

Ans:

Output	TFC	TVC	TC	AFC	AVC	AC	MC
0	200	0	200	-	-	0	-
1	200	50	250	200	50	250	50
2	200	90	290	100	45	145	40
3	200	120	320	66.6	40	106.6	30
4	200	140	340	50	35	85	20
5	200	175	375	40	35	80	35
6	200	230	430	33.3	38.3	71.6	55
7	200	310	510	28.5	44.2	72.7	80
8	200	400	600	25	50	75	90

15. Profit is reward for innovation. Explain.
16. You are given the following data of total product at different variable factors:

Units of Variable factors	0	1	2	3	4	5	6	7	8
Total product	0	20	50	90	120	140	150	155	150

a. Calculate marginal product and average product from the above information.

b. Draw a diagram and show the relationship between total product, average product and marginal product.

Ans: (a) MP: –, 20, 30, 40, 30, 20, 10, 5, –5, AP:–, 20, 25, 30, 30, 28, 26, 22.14, 18.75

Group 'C'

Analytical Answer Questions (attempt any two) **[2x15 = 30]**

17. What is monopoly? Explain how price and output are determined under monopoly in the long run? [3+12]
18. What is iso-quant? Explain the various properties of iso-quant. [3+12]
19. What is price elasticity of demand? Explain and illustrate the measurement of price elasticity of demand with the help of point method. [3+12]

TU Exam Questions- 2071

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt All Questions:

Group 'A'

Brief Answer Questions [2 x 10 = 20]

1. Define Micro Economics.
2. What do you mean by cross elasticity of demand?
3. The following schedule shows the amount of sandwich bought by a household of Nepal at different prices.

Period	Price of Sandwich (Rs.)	Demand of Sandwich
2069	50	80
2070	75	100

Does the behaviour of the household contradict the law of demand? Give reason for your answer.

4. Why does a rational consumer choose higher indifference curve?
5. Derive price when ep = 0.5 and MR = 20.

Ans: – Rs. 20

6. State the behaviour of TP, AP and MP in 2nd stage of production under Law of Variable Proportion.
7. Fill up the following isoquant schedule.

Combination	Labour	Capital	$MRTS_{L,R}$
A	1	14	–
B	2		4
C	3		3
D	4		2
E	5		1

Ans: Capital: 14,10,7,5,4

8. The firm under perfect competition in long run always earns abnormal profit. Do you agree with this statement?
9. Point out the determinants of supply.
10. List the fiv. changes as described by J.B Clark in his dynamic theory of profit.

Group 'B'

Descriptive Answer Questions

Attempt **FIVE** Questions. [5 × 10 =50]

11. Define microeconomics. Explain the uses of microeconomics.
12. Why the Hicksian utility analysis is superior to the Marshallian utility analysis?
13. Define average cost and marginal cost and show the relationship between them.
14. Consider the following table:

Price (Rs.)	Quantity	Total Cost	Marginal Cost	Total Revenue	Marginal Revenue	Profit
11	0	10				
10	1	12				

9	2	17				
8	3	21				
7	4	26				
6	5	33				
5	6	43				
4	7	60				
3	8	80				

(a) Complete the above table.

(b) Derive the TR curve and TC curve according to table.

(c) Derive profit and identify the maximum profit.

Ans: (a)

Price (Rs.)	Quantity	Total Cost	Marginal Cost	Total Revenue	Marginal Revenue	Prof
11	0	10	-	0	–	–10
10	1	12	2	10	10	– 2
9	2	17	5	18	8	1
8	3	21	4	24	6	3
7	4	26	5	28	4	2
6	5	33	7	30	2	– 3
5	6	43	10	30	0	– 13
4	7	60	17	28	-2	– 32
3	8	80	20	24	-4	– 56

(c) Max. Profit Rs. 3 at 3rd unit of output

15. Explain the law of variable proportion.

16. Suppose individual demand schedule for Suraj, Sunny and Sushila are given as:

Price	Suraj's Demand	Sunny's Demand	Sushila's Demand
10	160	80	40
20	80	40	20
30	40	20	10
40	20	10	0
50	0	0	0

Find:

(a) Market demand schedule.

(b) Market demand curve.

(c) Elasticity of demand when price falls from Rs.30 to 20.

(d) Elasticity of demand when price rises from Rs.20 to 30.

Ans: (a) 280, 140, 70, 30, 0 (c) 3 (d) 1

Group 'C'

Analytical Answer Questions

Attempt any **TWO** Questions. [2 × 15 = 30]

17. Define revenue. Explain the revenue curves in different markets. [3+12]

18 Define price discrimination. Explain the price and output determination with the help of third degree price discrimination. [3+12]

19. Critically examine the liquidity preference theory of interest. [15]

TU Exam Questions- 2072

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt All Questions:

Group 'A'

Brief Answer Questions [2 x 10 = 20]

1. Define micro economics in one sentence.
2. List out any five determinants of demand.
3. Why indifference curve is convex to the origin?
4. Why AR and MR curves are horizontal straight line in perfect competition?
5. Derive PCC (Price Consumption Curve) for substitute goods.
6. Define economic cost.
7. Define dumping.
8. Write any two examples of oligopoly market in Nepal.
9. What are the determinants of demand for loanable funds?
10. As a result of 2% fall in price of food its demand rises by 8%. Find out price elasticity of demand.

Group 'B'

Descriptive Answer Questions

Attempt any **FIVE** Questions. [5 × 10 =50]

11. Explain income effect with the help of diagram.
12. What is price elasticity of demand? How is it measured with the help of point method?
13. Derive short-run supply curve of a firm and industry under perfect competition.
14. Complete the following table and answer the given questions.

Output	TFC	TVC	TC	AFC	AVC	AC	MC
0	50						
1		30					
2		55					
3		77					
4		102					
5		132					
6		169					
7		216					
8		278					

a) Define TFC and TVC. [2]

b) Explain the relationship between average cost and marginal cost. [4]

Ans:

Output	TFC	TVC	TC (TFC + TVC)	AFC $\left(\frac{TFC}{Q}\right)$	AVC $\left(\frac{TVC}{Q}\right)$	AC(ATC) = $\left(\frac{TC}{Q}\right)$	MC $\left(\frac{\Delta TC}{\Delta Q}\right)$
0	50	–	50	–	–	–	–
1	50	30	80	50	30	80	30
2	50	55	105	25	27.5	52.5	25
3	50	77	127	16.67	25.6	42.33	22
4	50	102	152	12.5	25.67	38	25

5	50	132	182	10	26.4	36.4	30
6	50	169	219	8.33	28.17	36.5	37
7	50	216	266	7.14	30.86	38	47
8	50	278	328	6.25	24.75	41	62

15. You are given the following data of total product at different variable factors.

Units of variable factors	0	1	2	3	4	5	6	7
Total product	0	23	56	93	128	155	168	161

a) Calculate marginal product and average product from the above information.[4]

b) Show the relation of TP, AP and MP with the help of diagram. [6]

Ans: MP: –, 23, 33, 37, 35, 27, 13, –7; AP: –, 23, 28, 31, 32, 31, 28, 23

16. Explain the dynamic theory of profit. [10]

Group 'C

Analytical Answer Questions

Attempt any **Two** Questions [2×15=30]

17. What is consumer's equilibrium? Explain with the help of indifference curve technique how a consumer attains equilibrium.
18. What is monopolistic competition market? Explain price and output determination under monopolistic competition market in the long run.
19. Define interest. Explain the determination of rate of interest with the help of liquidity preference theory.

TU Exam Questions- 2072 (ii)

Candidates are required to give their answer in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt All Questions:

Group 'A'

Brief Answer Questions **[2 x 10 = 20]**

1. Why microeconomics is also called price theory?
2. Let, autonomous demand = 200, the slope of the demand curve = –5. Derive linear demand function.

Ans: $D_x = 200 + 5P_x$

3. With the help of the information given below, find out the cross elasticity of demand.

Price of teaching (Rs.)	Demand for Tea	Demand for Coffee
20 25	2000 1500	1800 2000

Ans: E_{XY}: 0.444

4. How do you measure returns to scale with the help of Cobb-Douglas production function?
5. Write any four characteristics of oligopoly market.
6. What is Income Consumption Curve (ICC)?
7. What conditions are necessary for the firms to be in equilibrium in all markets?
8. Why does Marginal revenue remain constant under perfect competitive market?

9. Derive budget equation if a consumer has total income of Rs.3,000 and price of X and Y goods are Rs.50 and Rs.70 respectively.

Ans: $50Q_X + 70Q_Y = 3000$

10. For what purposes do people hold money in liquid form according to Keynes?

Group 'B'

Descriptive Answer Questions

Attempt **Five** Questions [5×10=50]

11. Explain the importance of microeconomics.
12. How price elasticity of demand is measured with the help of point method?
13. How do you derive short run supply curve of a firm under perfect competition?
14. Consider the following table:

Output	TVC	TC	AFC	AVC	AC	MC
0	0	200				
1	180					
2		540				
3				160		
4					200	
5				148		
6						160
7		1280				
8	1300					
9						260
10				186		

a) Complete the above table

b) Why does TVC increase when output increases?

15. Explain the modern theory of rent.
16. Consider the following production schedule:

Schedule I				Schedule II				Schedule III			
Combination	L	K	Output	Combination	L	K	Output	Combination	L	K	Output
A	5	15	1500	E	5	20	2000	I	5	25	2500
B	6	11	1500	F	6	16	2000	J	6	21	2500
C	7	8	1500	G	7	13	2000	K	7	18	2500
D	8	6	1500	H	8	11	2000	L	8	16	2500

If a producer has total outlay of Rs.2,400, which he has to spend on two factors of production: Labour and Capital. The price of labour and capital are Rs.50 and Rs.100 respectively.

a) Compute the total cost for each combination containing in each production preference schedule and identify least cost combination which maximizes output at a given total cost outlay.

b) Sketch the iso-quant map from the above information.

Ans: a) Schedule I: A: 1750, B: 1400, C: 1150, D: 1000; Schedule II: E: 2250, F: 1900, G: 1650, H: 1500; Schedule III: I: 2750, J: 2400, K: 2150; L: 2000

Group 'C

Analytical Answer Questions

Attempt any **Two** Questions [2×15=30]

17. Define indifference curve. Explain how the consumer is in equilibrium under it?
18. Define monopolistic competition. Explain how the price and output is determined under it in short run.
19. What do you mean by cost? Explain the derivation of Long run Average Cost Curve (LAC).