HUT 300	Industrial Economics & Foreign Trade	Category	L	T	P	CREDIT
		HSMC	3	0	0	3

Preamble: To equip the students to take industrial decisions and to create awareness of economic environment.

Prerequisite: Nil

Course Outcomes: After the completion of the course the student will be able to

CO1	Explain the problem of scarcity of resources and consumer behaviour, and to evaluate the impact of government policies on the general economic welfare. (Cognitive knowledge level: Understand)
CO2	Take appropriate decisions regarding volume of output and to evaluate the social cost of production. (Cognitive knowledge level: Apply)
CO3	Determine the functional requirement of a firm under various competitive conditions. (Cognitive knowledge level: Analyse)
CO4	Examine the overall performance of the economy, and the regulation of economic fluctuations and its impact on various sections in the society. (Cognitive knowledge level: Analyse)
C05	Determine the impact of changes in global economic policies on the business opportunities of a firm. (Cognitive knowledge level: Analyse)

Mapping of course outcomes with program outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2										3	
CO2	2	2			2	2	3				3	
CO3	2	2	1								3	
CO4	2	2	1			1					3	
CO5	2	2	1								3	

	Abstract POs defined by National Board of Accreditation					
PO#	Broad PO	PO#	Broad PO			
PO1	Engineering Knowledge	PO7	Environment and Sustainability			
PO2	Problem Analysis	PO8	Ethics			
PO3	Design/Development of solutions	PO9	Individual and team work			
PO4	Conduct investigations of complex problems	PO10	Communication			
PO5	Modern tool usage	PO11	Project Management and Finance			
PO6	The Engineer and Society	PO12	Lifelong learning			

Assessment Pattern

Bloom's Category	Continuous A	End Semester	
	Test 1 (Marks)	Test 2 (Marks)	Examination Marks
Remember	15	15	30
Understand	20	20	40
Apply	15	15	30

Mark Distribution

Total Marks	CIE Marks	ESE Marks	ESE Duration
150	50	100	3 hours

Continuous Internal Evaluation Pattern:

Attendance : 10 marks

Continuous Assessment - Test (2 numbers) : 25 marks

Continuous Assessment - Assignment : 15 marks

Internal Examination Pattern:

Each of the two internal examinations has to be conducted out of 50 marks. First series test shall

be preferably conducted after completing the first half of the syllabus and the second series test

shall be preferably conducted after completing remaining part of the syllabus. There will be two

parts: Part A and Part B. Part A contains 5 questions (preferably, 2 questions each from the

completed modules and 1 question from the partly completed module), having 3 marks for each

question adding up to 15 marks for part A. Students should answer all questions from Part A.

Part B contains 7 questions (preferably, 3 questions each from the completed modules and 1

question from the partly completed module), each with 7 marks. Out of the 7 questions, a student

should answer any 5.

End Semester Examination Pattern:

There will be two parts; Part A and Part B.

Part A : 30 marks

Part B : 70 marks

Part A contains 10 questions with 2 questions from each module, having 3 marks for each question. Students should answer all questions. Part B contains 2 questions from each module of

which a student should answer any one. Each question can have maximum 3 sub-divisions and

carries 14 marks.

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SYLLABUS

HUT 300 Industrial Economics & Foreign Trade

Module 1 (Basic Concepts and Demand and Supply Analysis)

Scarcity and choice - Basic economic problems- PPC - Firms and its objectives - types of firms - Utility - Law of diminishing marginal utility - Demand and its determinants - law of demand - elasticity of demand - measurement of elasticity and its applications - Supply, law of supply and determinants of supply - Equilibrium - Changes in demand and supply and its effects - Consumer surplus and producer surplus (Concepts) - Taxation and deadweight loss.

Module 2 (Production and cost)

Production function – law of variable proportion – economies of scale – internal and external economies – Isoquants, isocost line and producer's equilibrium – Expansion path – Technical progress and its implications – Cobb-Douglas production function - Cost concepts – Social cost: private cost and external cost – Explicit and implicit cost – sunk cost - Short run cost curves – long run cost curves – Revenue (concepts) – Shutdown point – Break-even point.

Module 3 (Market Structure)

Perfect and imperfect competition – monopoly, regulation of monopoly, monopolistic completion (features and equilibrium of a firm) – oligopoly – Kinked demand curve – Collusive oligopoly (meaning) – Non-price competition – Product pricing – Cost plus pricing – Target return pricing – Penetration pricing – Predatory pricing – Going rate pricing – Price skimming.

Module 4 (Macroeconomic concepts)

Circular flow of economic activities – Stock and flow – Final goods and intermediate goods - Gross Domestic Product - National Income – Three sectors of an economy- Methods of measuring national income – Inflation- causes and effects – Measures to control inflation-Monetary and fiscal policies – Business financing- Bonds and shares -Money market and Capital market – Stock market – Demat account and Trading account - SENSEX and NIFTY.

Module 5 (International Trade)

Advantages and disadvantages of international trade - Absolute and Comparative advantage theory - Heckscher - Ohlin theory - Balance of payments - Components - Balance of Payments

deficit and devaluation – Trade policy – Free trade versus protection – Tariff and non-tariff barriers.

Reference Materials

- 1. Gregory N Mankiw, 'Principles of Micro Economics', Cengage Publications
- 2. Gregory N Mankiw, 'Principles of Macro Economics', Cengage Publications
- 3. Dwivedi D N, 'Macro Economics', Tata McGraw Hill, New Delhi.
- 4. Mithani D M, 'Managerial Economics', Himalaya Publishing House, Mumbai.
- 5. Francis Cherunilam, 'International Economics', McGraw Hill, New Delhi.

Sample Course Level Assessment Questions

Course Outcome 1 (CO1):

- 1. Why does the problem of choice arise?
- 2. What are the central problems?
- 3. How do we solve the basic economic problems?
- 4. What is the relation between price and demand?
- 5. Explain deadweight loss due to the imposition of a tax.

Course Outcome 2 (CO2):

- 1. What is shutdown point?
- 2. What do you mean by producer equilibrium?
- 3. Explain break-even point;
- 4. Suppose a chemical factory is functioning in a residential area. What are the external costs?

Course Outcome 3 (CO3):

- 1. Explain the equilibrium of a firm under monopolistic competition.
- 2. Why is a monopolist called price maker?
- 3. What are the methods of non-price competition under oligopoly?

4. What is collusive oligopoly?

Course Outcome 4 (CO4):

- 1. What is the significance of national income estimation?
- 2. How is GDP estimated?
- 3. What are the measures to control inflation?
- 4. How does inflation affect fixed income group and wage earners?

Course Outcome 5 (CO5):

- 1. What is devaluation?
- 2. Suppose a foreign country imposes a tariff on Indian goods. How does it affect India's exports?
- 3. What is free trade?
- 4. What are the arguments in favour of protection?

Model Question paper

QP CODE:	PAGES:3				
Reg No: Name :					
	SICAL UNIVERSITY FIFTH /SIXTH SEMESTER XAMINATION, MONTH & YEAR				
Cour	se Code: HUT 300				
Course Name: Indus	strial Economics & Foreign Trade				
Max.Marks:100	Duration: 3 Hours				
	PART A				
Answer all Question	s. Each question carries 3 Marks				
1. Why does an economic problem arise?					
2. What should be the percentage change	in price of a product if the sale is to be increased by 50				
percent and its price elasticity of dema	nd is 2?				
3. In the production function $Q = 2L^{1/2}K^{1/2}$	if L=36 how many units of capital are needed to				
produce 60 units of output?					
4. Suppose in the short run AVC 4. Suppo	se in the short run AVC <p<ac. firm="" produce<="" td="" this="" will=""></p<ac.>				
or shut down? Give reason.					
5. What is predatory pricing?					
6. What do you mean by non- price comp	etition under oligopoly?				
7. What are the important economic activity	ities under primary sector?				
8. Distinguish between a bond and share?					
What are the major components of hala	nce of payments?				

PART B

(Answer one full question from each module, each question carries 14 marks)

MODULE I

- 11. a) Prepare a utility schedule showing units of consumption, total utility and marginal utility, and explain the law of diminishing marginal utility. Point out any three limitations of the law.
 - b) How is elasticity of demand measured according to the percentage method? How is the measurement of elasticity of demand useful for the government?

Or

- 12. a) Explain the concepts consumer surplus and producer surplus.
 - b) Suppose the government imposes a tax on a commodity where the tax burden met by the consumers. Draw a diagram and explain dead weight loss. Mark consumer surplus, producer surplus, tax revenue and dead weight loss in the diagram.

MODULE II

- 13. a) What are the advantages of large-scale production?
 - b) Explain Producer equilibrium with the help of isoquants and isocost line. What is expansion path?

Or

- 14. a) Explain break-even analysis with the help of a diagram.
 - b) Suppose the monthly fixed cost of a firm is Rs. 40000 and its monthly total variable cost is Rs. 60000.
 - i. If the monthly sales is Rs. 120000 estimate contribution and break-even sales.
 - ii. If the firm wants to get a monthly profit of Rs.40000, what should be the sales?
 - c) The total cost function of a firm is given as TC=100+50Q 11Q²+Q³. Find marginal cost when output equals 5 units.

MODULE III

- 15. a) What are the features of monopolistic competition?
 - b) Explain the equilibrium of a firm earning supernormal profit under monopolistic competition.

Or

- 16.a) Make comparison between perfect competition and monopoly.
 - b) Explain price rigidity under oligopoly with the help of a kinked demand curve.

MODULE IV

- 17. a) How is national income estimated under product method and expenditure method?
 - b) Estimate GDPmp, GNPmp and National income

= 2000 (in 000 cores)			
= 500			
= -(300)			
= 800			
=700			
= 400			

Or

= 300

- 18. a) What are the monetary and fiscal policy measures to control inflation?
 - b) What is SENSEX?

MODULE V

- 19. a) What are the advantages of disadvantages of foreign trade?
 - b) Explain the comparative cost advantage.

Net-indirect tax

Or

- 20. a) What are the arguments in favour protection?
 - b) Examine the tariff and non-tariff barriers to international trade.

 $(5 \times 14 = 70 \text{ marks})$

Teaching Plan

Module 1 (Basic concepts and Demand and Supply Analysis)		
1.1	Scarcity and choice – Basic economic problems - PPC	1 Hour
1.2	Firms and its objectives – types of firms	1 Hour
1.3	Utility – Law of diminishing marginal utility – Demand – law of demand	1 Hour
1.4	Measurement of elasticity and its applications	1 Hour
1.5	Supply, law of supply and determinants of supply	1 Hour
1.6	Equilibrium – changes in demand and supply and its effects	1 Hour
1.7	Consumer surplus and producer surplus (Concepts) – Taxation and deadweight loss.	1 Hour
	Module 2 (Production and cost)	7 Hours
2.1	Productions function – law of variable proportion	1 Hour
2.2	Economies of scale – internal and external economies	1 Hour
2.3	producers equilibrium – Expansion path	1 Hour
2.4	Technical progress and its implications – cob Douglas Production function	1 Hour
2.5	Cost concepts – social cost: private cost and external cost – Explicit and implicit cost – sunk cost	1 Hour
2.6	Short run cost curves & Long run cost curves	1 Hour
2.7	Revenue (concepts) – shutdown point – Break-even point.	1 Hour
	Module 3 (Market Structure)	6 hours
3.1	Equilibrium of a firm, MC – MR approach and TC – TR approach	1 Hour
3.2	Perfect competition & Imperfect competition	1 Hour
3.3	Monopoly – Regulation of monopoly – Monopolistic competition	1 Hour
3.4	Oligopoly – kinked demand curve	1 Hour
3.5	Collusive oligopoly (meaning) – Non price competition	1 Hour
3.6	Cost plus pricing – Target return pricing – Penetration, Predatory pricing – Going rate pricing – price skimming	1 Hour

	Module 4 (Macroeconomic concepts)	7 Hours		
4.1	Circular flow of economic activities	1 Hour		
4.2	Stock and flow – Final goods and intermediate goods – Gross Domestic Product - National income – Three sectors of an economy	1 Hour		
4.3	Methods of measuring national income	1 Hour		
4.4	Inflation – Demand pull and cost push – Causes and effects	1 Hour		
4.5	Measures to control inflation – Monetary and fiscal policies	1 Hour		
4.6	Business financing – Bonds and shares – Money market and capital market	1 Hour		
4.7	7 Stock market – Demat account and Trading account – SENSEX and NIFTY			
Module 5 (International Trade)				
5.1	Advantages and disadvantages of international trade	1 Hour		
5.2	Absolute and comparative advantage theory	2 Hour		
5.3	Heckscher – Ohlin theory	1 Hour		
5.4	Balance of payments - components	1 Hour		
5.5	Balance of payments deficit and devaluation	1 Hour		
5.6	Trade policy – Free trade versus protection	1 Hour		
5.7	Tariff and non tariff barriers.	1 Hour		

HUT		Category	L	Т	P	Credit
310	Management for Engineers	НМС	3	0	0	3

Preamble: This course is intended to help the students to learn the basic concepts and functions of management and its role in the performance of an organization and to understand various decision-making approaches available for managers to achieve excellence. Learners shall have a broad view of different functional areas of management like operations, human resource, finance and marketing.

Prerequisite: Nil

Course Outcomes After the completion of the course the student will be able to

CO1	Explain the characteristics of management in the contemporary context (Cognitive
COI	Knowledge level: Understand).
CO2	Describe the functions of management (Cognitive Knowledge level: Understand).
CO2	Demonstrate ability in decision making process and productivity analysis (Cognitive
CO3	Knowledge level: Understand).
COA	Illustrate project management technique and develop a project schedule (Cognitive
CO4	Knowledge level: Apply).
CO5	Summarize the functional areas of management (Cognitive Knowledge level:
COS	Understand).
CO6	Comprehend the concept of entrepreneurship and create business plans (Cognitive
CO6	Knowledge level: Understand).