



**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, Pilani**  
**Pilani Campus**  
**AUGS/ AGSR Division**

**SECOND SEMESTER 2020-21**  
**COURSE HANDOUT**

**Date: 18.01.2021**

In addition to part I (General Handout for all courses appended to the Timetable) this portion gives further specific details regarding the course.

**Course No** : ECON F242  
**Course Title** : MICROECONOMICS  
**Instructor-in-Charge** : GEETILAXMI MOHAPATRA  
**Tutorial Instructor** : GEETILAXMI MOHAPATRA

**1. Course Description:**

The course is designed to give emphasis on the application of real life examples on various fundamental issues of Microeconomics.

**2. Scope and Objective of the Course:**

This course extends the tools of modern microeconomic theory and discusses their application to utility and demand; production functions and cost; pricing of output under perfect competition, monopoly, oligopoly, etc.; pricing of productive services; Inter-temporal decision-making; equity, general equilibrium; externalities and public goods. An attempt has been made to provide an analytical and quantitative background in the fundamentals of microeconomic analysis.

**3. Text Books:** Snyder, Christopher and Walter Nicholson, **Microeconomics Theory: Basic Principles and Extensions**, Cengage Learning, India Edition (2012 by South-Western).

**4. Reference Books:**

- R1. Koutsoyiannis A, Modern Microeconomics, The MacMillan Press Ltd, Hong Kong, 1982.
- R2. Jeffrey M Perloff, Microeconomics, Pearson Education, Addison Wesley Longman (Singapore) Pte. Ltd., Delhi, Fourth Edition, 2007

**5. Course Plan:**

Module No.	Lecture Session	Reference	Learning outcomes
Module I: Introduction	<b>L1.1:</b> Introduction to Microeconomics, Economic Models	Chapter 1	Overview of the course, Building of economic Models
Module II: Economic theory of choice,	<b>L3.1:</b> Axioms of Rational Choice and the concept of utility <b>L3.2:</b> Utility functions for different Preferences	Chapter 3	Modeling of individual behavior; Measurement of utility; Utility functions for different Preferences
	<b>L4.1:</b> Utility maximizations and corner solutions <b>L4.2:</b> Lump sum principle <b>L4.3:</b> Expenditure functions	Chapter 4	Determination of optimal behavior of consumers; Utility Maximization
	<b>L5.1:</b> Demand functions, factors relating to change in demand <b>L5.2:</b> Calculation of income and substitution effect <b>L5.3:</b> Compensated demand curves and functions <b>L5.4:</b> Revealed Preference theory	Chapter 5	Derivation of demand curve, change in it due to changes in prices and income, Compensated Demand Curve, Elasticities, Slutsky Equation, Revealed Preference Theory
	<b>L6.1:</b> Gross substitutes and complements <b>L6.2:</b> Composite commodity theorem	Chapter 6	Understanding Demand Relationships among Goods: Complements and Substitutes.



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Module III: Production and Supply	<b>L9.1:</b> Production functions in the short run and long run <b>L9.2:</b> Elasticity of substitution and different production functions <b>L9.3:</b> Technical progress and its measurement	Chapter 9 and R1	Derivation of Isoquants; to examine the behavior of production functions in the short run and long run
	<b>L10.1:</b> Relationship between profit maximization and cost minimization <b>L10.2:</b> Contingent demand for inputs and firm's expansion path <b>L10.3:</b> Relationship between short run and long run cost curves	Chapter 10 and RI	Measurement of costs in the short run and long run; derivation of cost functions from production relations
	<b>L11.1:</b> Relationship between marginal revenue and elasticity, concept of mark-up <b>L11.2:</b> Derivation of short-run supply function by a price-taking firm <b>L11.3:</b> Profit maximization and input demand	Chapter 11	The alternative modes of optimizing behavior of the firm; derivation of the factor demands from optimizing behavior
Module IV: Competitive Markets	<b>L12.1:</b> Derivation of market demand function and supply function <b>L12.2:</b> Derivation of shape of Long run supply function <b>L12.3:</b> Application of competitive markets : Excise taxes <b>L12.4:</b> Other Applications of competitive markets	Chapter 12 and R2	Estimation of market demand and supply functions in the short run and long run; market equilibrium analysis and profit maximization, application of competitive market
	<b>L13.1:</b> Determination of price and output in a general equilibrium setup	Chapter 13	The competitive price system, General equilibrium and factor prices
Module V: Market Power	<b>L14.1:</b> Monopoly, price and output determination and profit calculations <b>L14.2:</b> Price discrimination: First degree and second degree, two-part tariffs <b>L14.3:</b> Third-degree price discrimination <b>L14.4:</b> Effect of government actions on monopoly operation	Chapter 14	Study of traditional theory of monopoly; price discrimination; pricing and output determination under monopoly; welfare effects of monopoly; cost advantages; government actions; two-part tariffs
	<b>L15.1:</b> Price and output decision under monopolistic competition <b>L15.2:</b> Bertrand and cournot model <b>L15.3:</b> Stackleberg model and dominant firm model <b>L8.1:</b> Game theory and cournot model <b>L8.2:</b> Decision tree	Chapter 15 and 8 and R1	Theories of imperfect competition; concept of Duopoly and Oligopoly; pricing and output determination in Oligopolistic competition; co-operative and non-cooperative Oligopoly models and Stackelberg model; The Cournot Solution;
Module VI: Pricing in Input Markets	<b>L6.1:</b> Concept of monopsony and its equilibrium	Chapter 16	Pricing in Inputs such as Labor Market
Module VII: Market Failure	<b>L8.1:</b> Asymmetric information <b>L19.1:</b> Externality and its solution <b>L19.2:</b> Public goods and its characteristics	Chapter 18 & 19	To examine the situations where market fails to operate: Asymmetric information, externalities and public goods



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**6. Evaluation Scheme:**

Component	Duration	Weightage (%)	Date & Time	Nature of component (Close Book/ Open Book)
Midsemester Test	90 Min.	30		Open Book
Tutorial test		30	Continuous	Open Book
Comprehensive Examination	2 hrs.	40	07/05/2021 (FN)	Partly open book

**7. Chamber Consultation Hour:** Tuesday 4 - 5.50PM (6165 – M)

**8. Notices:** Students must regularly check their BITS e-mail account for course-related announcements/notices.

**9. Make-up Policy:** No make-up shall be granted for the tutorial test and students will get one buffer in tutorial test.

Make-up for the mid-semester test and the comprehensive examination shall be granted only in genuine cases. The students must avail prior permission or intimate I/C before the exam is held to qualify for the make-up. In any case, original proofs justifying the absence will have to be furnished.

**10. Note (if any):** *Students must write correct ID numbers, in all the evaluative components, failing which their answer sheets will not be evaluated.*

**Instructor-in-charge**  
**Course No. ECON F242**