

# Techno India NJR Institute of Technology



## Course File MEFA (4CE1- 03)

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**Department of Mechanical**

For Techno India NJR Institute of Technology  
पंकज पौरवाल  
Dr. Pankaj Kumar Porwal  
(Principal)



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Syllabus

2<sup>nd</sup> Year - IV Semester: B.Tech. : Mechanical Engineering

### 4ME1-03/3ME1-03 : MANAGERIAL ECONOMICS AND FINANCIAL ACCOUNTING

Credit: 2

Max. Marks: 100 (IA:20, ETE:80)

2L+0T+0P

End Term Exam: 2 Hours

SN		Hours
1	<b>Introduction:</b> Objective, scope and outcome of the course.	1
2	<b>Basic economic concepts-</b> Meaning, nature and scope of economics, deductive vs inductive methods, static and dynamics, Economic problems: scarcity and choice, circular flow of economic activity, national income-concepts and measurement.	3
3	<b>Demand and Supply analysis-</b> Demand-types of demand, determinants of demand, demand function, elasticity of demand, demand forecasting –purpose, determinants and methods, Supply-determinants of supply, supply function, elasticity of supply.	5
4	<b>Production and Cost analysis-</b> Theory of production- production function, law of variable proportions, laws of returns to scale, production optimization, least cost combination of inputs, isoquants. Cost concepts-explicit and implicit cost, fixed and variable cost, opportunity cost, sunk costs, cost function, cost curves, cost and output decisions, cost estimation.	5
5	<b>Market structure and pricing theory-</b> Perfect competition, Monopoly, Monopolistic competition, Oligopoly.	4
6	<b>Financial statement analysis-</b> Balance sheet and related concepts, profit and loss statement and related concepts, financial ratio analysis, cash-flow analysis, funds-flow analysis, comparative financial statement, analysis and interpretation of financial statements, capital budgeting techniques.	8
	<b>TOTAL</b>	<b>26</b>

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## Course Overview:

To integrate the basic concepts of economics with the tools of mathematics and statistics in order to analyse and make optimal business decisions. To Understand the roles of managers in firms, Understand the internal and external decisions to be made by managers, Analyze the demand and supply conditions and assess the position of a company, Design competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products and the structures of the markets, Analyze real-world business problems with a systematic theoretical framework., Make optimal business decisions by integrating the concepts of economics, mathematics and statistics.

## Course Outcomes:

CO NO	COGNITIVE LEVEL	COURSE OUTCOME
4CS1-03.1	Synthesis	Describe the core economic terms, concepts, and theories. Apply the concept of equilibrium to both microeconomics and macroeconomics.
4CS1-03.2	Synthesis	Explain the function of market and prices as allocate mechanisms.
4CS1-03.3	Synthesis	Identify key macroeconomic indicators and measures of economics change, growth, and development
4CS1-03.4	Analysis	Discuss in detail different market situations such as monopoly, oligopoly, monopolistic and perfect markets and explanation through graphical representation.
4CS1-03.5	Analysis	Discuss the process & principles of financial accounting and prepare Profit & Loss A/c. and Balance Sheet of an enterprise transforms.

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## Course Outcome Mapping with Program Outcome:

Course Outcome	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3
CO242.1	2	2	2	2	1	1	1	1	1	1	1	2	1	1	1
CO242.2	2	2	2	2	1	1	1	1	1	1	1	2	1	1	1
CO242.3	2	2	2	2	1	1	1	1	1	1	1	2	1	1	1
CO242.4	1	2	2	2	2	2	1	2	2	2	2	2	2	0	0
CO242.5	1	1	2	1	2	2	1	1	2	1	1	2	1	0	0
CO242 (AVG)	1.6	1.8	2	1.8	1.4	1.4	1	1.2	1.4	1.2	1.2	2	1.2	0.6	0.6

### Course Coverage Module Wise



## Techno India NJR Institute of Technology

Academic Administration of Techno NJR Institute

### Syllabus Deployment

Name of Faculty: Mr. Shambhu P. Choubisa

Subject Code: 4ME1-03/3ME1-03(MEFA)

Department: Department of Mechanical Engineering SEM: IV

Total No. of Lectures Planned: 26

Lecture No.	Unit	Topic
1	1	<b>Introduction</b> to scope, objective and outcome of subject
2	2	Meaning, nature and scope of economics, deductive vs inductive methods,
3	2	static and dynamics, Economic problems: scarcity and choice,

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4	2	circular flow of economic activity,
5	2	national income-concepts and measurement.
6	2	Numericals
7	<b>3</b>	Demand-types of demand, determinants of demand,
8	3	demand function, elasticity of demand
9	3	demand forecasting –purpose, determinants and methods
10	3	Supply-determinants of supply, supply function, elasticity of supply.
11	<b>4</b>	Theory of production- production function
12	4	law of variable proportions, laws of returns to scale, production optimization,
13	4	least cost combination of inputs, isoquants.
14	4	Cost concepts-explicit and implicit cost, fixed and variable cost,
15	4	opportunity cost, sunk costs, cost function,
16	4	cost curves, cost and output decisions, cost estimation.
17	<b>5</b>	Market structure and pricing theory ,Perfect competition, Monopoly,
18	5	Monopolistic competition, Oligopoly
19	5	Equilibrium price, equilibrium quantity
20	<b>6</b>	Balance sheet and related concepts,
21	6	profit and loss statement and related concepts,
22	6	financial ratio analysis, cash-flow analysis, funds flow analysis,
23	6	comparative financial statement, ,
24	6	analysis and interpretation of financial statements
25	6	capital budgeting techniques
26	6	Numerical

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## Assessment Methodology:

1. Practical exam in lab where they have to prepare practical model related to economics laws .(Once in a week)
2. Assignments one from each unit.
3. Midterm subjective paper where they have to attempt numericals.
4. Final paper at the end of the semester subjective.

## Teaching and Learning resources unit-wise:

### Unit-1

Basic Concept of Economics

Video

Tutorials:<https://www.youtube.com/watch?v=yCyMktNFZ88&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg>

Theory

conchttps:[https://drive.google.com/file/d/1WdD6qd5hk\\_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing](https://drive.google.com/file/d/1WdD6qd5hk_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing)

Sample

Quiz:<https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

### Unit-2

A. National Income

Video Tutorials:<https://www.youtube.com/watch?v=A374ELBK7Cc>

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Theory

concepts: [https://drive.google.com/file/d/1WdD6qd5hk\\_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing](https://drive.google.com/file/d/1WdD6qd5hk_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing)

Sample Quiz:

<https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

B. National Income numerical

Video Tutorials: <https://www.youtube.com/watch?v=oHdMJ4MDRO4>

Theory concept: -

[https://drive.google.com/file/d/1WdD6qd5hk\\_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing](https://drive.google.com/file/d/1WdD6qd5hk_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing)

Sample

Quiz: <https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

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## Unit-3

### A. Theory of demand & supply

Video Tutorials:

[https://www.youtube.com/watch?v=ytQxam0\\_Hns&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=2](https://www.youtube.com/watch?v=ytQxam0_Hns&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=2)

Theory concept:

[https://drive.google.com/file/d/1WdD6qd5hk\\_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing](https://drive.google.com/file/d/1WdD6qd5hk_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing)

Sample Quiz:

<https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

### B. Determinants of supply

Video Tutorials:

<https://www.youtube.com/watch?v=zNbCYc4n1-s&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=4>

Theory concepts:

[https://drive.google.com/file/d/1WdD6qd5hk\\_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing](https://drive.google.com/file/d/1WdD6qd5hk_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing)

Sample

Quiz: <https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

## Unit-4

### A. Production optimization & types of cost

Video

Tutorials: <https://www.youtube.com/watch?v=VU1zySe-8NA&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=15>

Theory concepts:

[https://drive.google.com/file/d/1WdD6qd5hk\\_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing](https://drive.google.com/file/d/1WdD6qd5hk_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing)

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Sample

Quiz: <https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

B. Types of cost curve

Video Tutorials:

<https://www.youtube.com/watch?v=HLCBEJM2y7M&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=17>

Theory concepts:

[https://drive.google.com/file/d/1WdD6qd5hk\\_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing](https://drive.google.com/file/d/1WdD6qd5hk_WdoEIN2TYW3icvj9jmrUzy/view?usp=sharing)

Sample Quiz:.

<https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

## Unit-5

A. Types of Market : Economics

Video Tutorials: <https://www.youtube.com/watch?v=PuEdwVHaUVQ>

Theory: <https://drive.google.com/file/d/13KaLXWAFpEBW-RINOY7OsLWcMsJK39rL/view?usp=sharing>

Sample

Quiz: <https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

B. Market Equilibrium

Video

Tutorials: <https://www.youtube.com/watch?v=HnAwvKAqaMU&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=14>

Theory

concepts: <https://drive.google.com/file/d/13KaLXWAFpEBW-RINOY7OsLWcMsJK39rL/view?usp=sharing>

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Sample

Quiz:<https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

## Unit-6

C. Financial Statement

Video

Tutorials:[https://www.youtube.com/watch?v=OT5RdoJAKhY&list=PLPjSqITyvDeUTEAOGhip\\_ubjN3y8oqT13](https://www.youtube.com/watch?v=OT5RdoJAKhY&list=PLPjSqITyvDeUTEAOGhip_ubjN3y8oqT13)

Theory:

[https://drive.google.com/file/d/1J011YW11\\_UhD8ebU1YWws3wpzFfga1UU/view?usp=sharing](https://drive.google.com/file/d/1J011YW11_UhD8ebU1YWws3wpzFfga1UU/view?usp=sharing)

Sample

Quiz:<https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

D. Numericals on Financial statement.

Video Tutorials:

[https://www.youtube.com/watch?v=OT5RdoJAKhY&list=PLPjSqITyvDeUTEAOGhip\\_ubjN3y8oqT13](https://www.youtube.com/watch?v=OT5RdoJAKhY&list=PLPjSqITyvDeUTEAOGhip_ubjN3y8oqT13)

Theory

concepts:[https://drive.google.com/file/d/1J011YW11\\_UhD8ebU1YWws3wpzFfga1UU/view?usp=sharing](https://drive.google.com/file/d/1J011YW11_UhD8ebU1YWws3wpzFfga1UU/view?usp=sharing)

Sample

Quiz:<https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/>

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Previous Year Question Papers:

<b>3E1103</b>	Roll No. _____	Total No of Pages: <b>2</b>
	<b>3E1103</b> <b>B. Tech. III - Sem. (Main / Back) Exam., Dec. 2019</b> <b>HSMC Civil Engineering</b> <b>3CE1-03 Managerial Economics &amp; Financial Accounting</b> <b>Common For All Branches</b>	

Time: 2 Hours

Maximum Marks: 80

*Instructions to Candidates:*

*Attempt all five questions from Part A, four questions out of six questions from Part B and two questions out of three from Part C.*

*Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used /calculated must be stated clearly.*

*Use of following supporting material is permitted during examination. (Mentioned in form No. 205)*

1. NIL \_\_\_\_\_

2. NIL \_\_\_\_\_

**PART – A**

**(Answer should be given up to 25 words only)**

**[5×2=10]**

**All questions are compulsory**

- Q.1 Why do economic problems arise?
- Q.2 What is demand forecasting?
- Q.3 What does opportunity cost mean?
- Q.4 What do you mean by monopolistic competition?
- Q.5 What does a balance sheet depicts?

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## **PART – B**

**(Analytical/Problem solving questions)**

**[4×10=40]**

**Attempt any four questions**

- Q.1 Explain the deductive and inductive methods of constructing economic theory.
- Q.2 Explain with the help of curves the relationship between total cost, total variable cost and total fixed cost.
- Q.3 How does perfect competition differ from monopoly? Discuss.
- Q.4 Discuss the concepts of assets and liabilities.
- Q.5 Write short notes on comparative financial statements.
- Q.6 Explain the concept of elasticity of demand.

## **PART – C**

**(Descriptive/Analytical/Problem Solving/Design Questions)**

**[2×15=30]**

**Attempt any two questions**

- Q.1 What are the three methods of measuring national income? Elaborate.
  - Q.2 Using suitable diagrams explain the Law of variable proportions.
  - Q.3 Critically examine the Present Value Method and Internal Rate of Return Method for evaluating capital budgeting proposals.
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