**Techno India NJR Institute of Technology**



**Course File**

**MEFA (4ME1- 03/3ME1-03)**

Shambhu P.Choubisa

(Assistant Professor)

**Department of Mechanical**



**Course Overview:**

To integrate the basic concepts of economics with the tools of mathematics and statistics in order to analyze 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**  |
| 1 | Synthesis | Understanding the basic concepts of managerial economics. |
| 2 | Synthesis | Understanding the economic goals of the firms and optimal decision making.  |
| 3 | Synthesis | Basic concepts of Demand, Supply and Equilibrium and their determinants. • Analyzing the effect of these factors on market dynamics. |
| 4 | Synthesis | Understanding and estimating production function. • Law of DMR and three stages of production. • Isoquant and Isocost and finding out optimal combinations of inputs. |
| 5 | Synthesis | Pricing and output decisions of monopolistic and oligopoly firm. • Effect of non-price factors on products and services of monopolistic and oligopoly firms |
| 6 | Synthesis | To unnderstand the banking concepts |

**Course Outcome Mapping with Program Outcome:**

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| --- | --- |
| **Course Outcome**  | **Program Outcomes (PO’s)** |
| **CO. NO.** | **Domain Specific (PSO)** | **Domain Independent (PO)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Course Outcome** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** |
| CO1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 1 |
| CO2 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 1 |
| CO3 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 0 |
| C04 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 0 |
| C05 | 1 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 1 |
| C06 | 1 | 1 | 1 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 2 | 1 |
| **Average** | 1.00 | 0.67 | 1.00 | 0.83 | 1.00 | 1.50 | 0.50 | 0.00 | 0.00 | 0.00 | 2.17 | 0.67 |

**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** | **Introduction** 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, |
| 4 | 2 | circular flow of economic activity, |
| 5 | 2 | national income-concepts and measurement. |
| 6 | 2 | Numericals |
| 7 | **3** | 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 | **4** | 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 | **5** | Market structure and pricing theory ,Perfect competition, Monopoly, |
| 18 | 5 | Monopolistic competition, Oligopoly |
| 19 | 5 | Equilibrium price, equilibrium quantity |
| 20 | **6** | 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 | Numericals |

**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](mefa%20course%20file.docx)

Theory conchttps:[https://drive.google.com/file/d/1WdD6qd5hk\_WdoElN2TYW3icvj9jmrUzy/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz:https:[//scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

**Unit-2**

1. National Income

Video Tutorials:[https://www.youtube.com/watch?v=A374ELBK7Cc](mefa%20course%20file.docx)

Theory concepts:[https://drive.google.com/file/d/1WdD6qd5hk\_WdoElN2TYW3icvj9jmrUzy/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz: https:[https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

1. National Income numericals

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

Theory concept:-https:[//drive.google.com/file/d/1WdD6qd5hk\_WdoElN2TYW3icvj9jmrUzy/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz: https:/[/scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

**Unit-3**

1. Theory of demand & supply

Video Tutorials: <https://www.youtube.com/watch?v=ytQxam0_Hns&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=2>

Theory concept: [https://drive.google.com/file/d/1WdD6qd5hk\_WdoElN2TYW3icvj9jmrUzy/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz: [https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

B. Deteminants of supply

Video Tutorials: [https://www.youtube.com/watch?v=zNbCYc4n1-s&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=4](mefa%20course%20file.docx)

Theory concepts: [https://drive.google.com/file/d/1WdD6qd5hk\_WdoElN2TYW3icvj9jmrUzy/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz: [https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

**Unit-4**

1. Production optimization & types of cost

Video Tutorials:[https://www.youtube.com/watch?v=VU1zySe-8NA&list=PLPjSqITyvDeV84Qiruw4xVWGQPTctrlhg&index=15](mefa%20course%20file.docx)

Theory concepts: [https://drive.google.com/file/d/1WdD6qd5hk\_WdoElN2TYW3icvj9jmrUzy/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz: [https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](Course%20File%20Et.docx)

1. 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\_WdoElN2TYW3icvj9jmrUzy/view?usp=sharing

Sample Quiz: [https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](Course%20File%20Et.docx)

**Unit-5**

1. Types of Market : Economics

Video Tutorials: [https://www.youtube.com/watch?v=PuEdwVHaUVQ](mefa%20course%20file.docx)

Theory:[https://drive.google.com/file/d/13KaLXWAfpEBW-RlNOY7OsLWcMsJK39rL/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz: [https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](Course%20File%20Et.docx)

1. Market Equilibrium

Video Tutorials:[https://www.youtube.com/watch?v=HnAwvKAqaMU&list=PLPjSqITyvDeV84Qiruw](mefa%20course%20file.docx)4xVWGQPTctrlhg&index=14

Theory concepts: [https://drive.google.com/file/d/13KaLXWAfpEBW-RlNOY7OsLWcMsJK39rL/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz: [https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

**Unit-6**

1. Finacial Statement

Video Tutorials: [https://www.youtube.com/watch?v=OT5RdoJAkhY&list=PLPjSqITyvDeUTeAOGhip\_ubjN3y8oqT13](mefa%20course%20file.docx)

Theory: [https://drive.google.com/file/d/1J01lYWl1\_UhD8ebU1YWws3wpzFfga1UU/view?usp=sharing](mefa%20course%20file.docx)

Sample Quiz:[https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

1. Numericals on Financial statement.

Video Tutorials: [https://www.youtube.com/watch?v=OT5RdoJAkhY&list=PLPjSqITyvDeUTeAOGhip\_ubjN3y8oqT13](mefa%20course%20file.docx)

Theory concepts: <https://drive.google.com/file/d/1J01lYWl1_UhD8ebU1YWws3wpzFfga1UU/view?usp=sharing>

Sample Quiz: [https://scholarexpress.com/multiple-choice-questions-mcq-with-answers-on-managerial-economics/](mefa%20course%20file.docx)

Previous Year Question Papers:

