

# GUJARAT TECHNOLOGICAL UNIVERSITY

## MTM (Masters in Technology Management) (Semester –V)

### DUAL DEGREE PROGRAMME

**Subject: ENGINEERING ECONOMICS**

**Subject Code: 4250102**

**Course Contents:**

<b>UNIT NO.</b>	<b>CONTENTS</b>	<b>NO. OF SESSIONS</b>	<b>WEIGHTAGE IN EXAM</b>
<b>I</b>	<b>Introduction to the subject:</b> Introduction to Economics, Micro and Macro Economics ,Concept of Engineering Economics – Engineering efficiency, Economic efficiency, Scope of engineering economics, Relationship between Science, Engineering, Technology and Economic Development. Production Possibility Curve, Circular flow of income	10	20%
<b>II</b>	Concept of time value of money, Meaning of Demand, Law of Demand, Determinants of Demand, Law of supply, Determinants of Supply, Concept of Market Equilibrium.	10	20%
<b>III</b>	Meaning of Production and factors of production, Law of variable proportions and returns to scale. Internal and external economies and diseconomies of scale. Concepts of cost of production, different types of costs; accounting cost, sunk cost, marginal cost, and Opportunity cost. Concept of Break even analysis with Practical examples and numerical for calculating total cost, AVC, MC etc	10	20%
<b>IV</b>	Meaning of market, types of markets, concept of perfect competition, Concept of Monopoly, Concept of Monopolistic, Concept of Oligopoly. <b>(Only Main features of the markets to be discussed, Price and output determination in excluded from syllabus)</b>	10	20%
<b>V</b>	Concept of Inflation, Reasons for inflation in India, Effects of inflation, Remedial measures, Concept of GDP, GNP. Functions of Central Bank (RBI), features and functions of commercial banks, multiple credit creation of deposits, Concepts of Bank discount rate, repo rate, reverse repo rate, Cash Reserve Ratio and Statutory Liquidity Ratio.	10	20%

**Books:**

1. Managerial Economics, Agarwal, Pearson Publication (2013 Edition)
2. Managerial Economics, Yogesh Maheshwari, PHI Publication, Latest Edition
3. Engineering Economics, Khan, Pearson Publication
4. Managerial Economics, H. L. Ahuja, S. Chand Publication
5. Managerial Economics, Ravikesh Srivastava, Oxford Publication

**Session Outline:**

NO	CONTENTS	NO. OF SESSIONS
1	Introduction to Economics, Micro and Macro Economics	1-2
2	Concept of Engineering Economics – Engineering efficiency, Economic efficiency, Scope of engineering economics,	3-5
3	Relationship between Science, Engineering, Technology and Economic Development.	6-8
4	Production Possibility Curve, Circular flow of income	9-10
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6	Concept of time value of money	11-12
7	Meaning of Demand, Law of Demand, Determinants of Demand,	13-16
8	Law of supply, Determinants of Supply, Concept of Market Equilibrium.	17-20
9	Meaning of Production and factors of production, Law of variable proportions and returns to scale.	21-22
10	Internal and external economies and diseconomies of scale.	23-24
11	Concepts of cost of production, different types of costs; accounting cost, sunk cost, marginal cost, and Opportunity cost.	25-27
12	Concept of Break even analysis with Practical examples and numerical for calculating total cost, AVC, MC etc	28-30
13	Meaning of market, types of markets, concept of perfect competition,	31-35
14	Concept of Monopoly, Concept of Monopolistic, Concept of Oligopoly. <b>(Only Main features of the markets to be discussed, Price and output determination in excluded from syllabus)</b>	36-40
15	Concept of Inflation, Reasons for inflation in India, Effects of inflation, Remedial measures	41-43
16	Concept of GDP, GNP.	44
17	Functions of Central Bank (RBI), features and functions of commercial banks	45-47
18	Multiple credit creation of deposits, Concepts of Bank discount rate, repo rate, reverse repo rate, Cash Reserve Ratio and Statutory Liquidity Ratio.	48-50