

Gujarat Technological University
MASTERS IN TECHNOLOGICAL MANAGEMENT-MTM
DUAL DEGREE PROGRAMME
Semester X

Subject Name: INVENTORY MANAGEMENT

Subject Code: 4210109

COURSE OBJECTIVES:

- Understand the strategic role of inventory management in creating and enhancing a firm's competitive advantages
- Understand key concepts and issues of Inventory Management and Inventory Techniques apply analytical skills and problem-solving tools to the analysis of the inventory problems

Course Contents:

Module No	Module Content	Session No.
1	Inventory Management: An Introduction, Types of Inventory	1-2
2	Purpose of Inventory Management	3
3	Working Capital and Inventory , Forecasting	4-5
4	Computation of Various Period for inventory costing, Ration Analysis	6-7
5	Various Costs : Cost of Ordering, Holding Cost, Under stoking Cost, Cost Factors	8-10
6	Lead Time influences on Inventories , Productivity of Inventories	11-12
7	Managing Inventory : Tools and Techniques of Inventory Management, Inventory Control Systems, Inventory Management Systems	13-15
8	ABC Analysis, HML Analysis, VED Analysis, FSN Analysis, SDE Analysis, GOLF Analysis, SOS Analysis	16-19
9	Inventory Level, System of Inventory Control	20
10	Double Bin System, Economic Order Quantity (EOQ)	21-22
11	Re-order Point and Safety Stock	23
12	Just in Time Inventory Management, Material Requirement Planning System	24-26
13	Materials Requirement Planning (MRP) Model and EOQ Models	27-28
14	Accounting Systems for Inventory , Inventory Ratios, Inventory Audit	29-30
15	Material Common Pool (MCP), Objectives and Benefits	31-32

16	Disposal of Obsolete Materials, Surplus and Scrap	33-34
17	Management of Surplus Disposal	35-36
	Contemporary Issues in Inventory Management: Students have to prepare a report on Inventory Management of any organization of his/her choice, prepare a report in consultation with faculty member and present the report in the class.	37-40

Text Books

Sr. No	Author	Name of Text Book	Publisher Edition
1	D. Chandra Bose	Inventory Management	Prentice Hall of India (PHI) -2007

Reference Books

Sr. No	Author	Name of Reference Book	Publisher Edition
1	R S Saxena	Inventory Management	Global India Publications Pvt Ltd New Delhi - 2009
2	Max Muller	Essentials of Inventory Management	Mc Millan Publication 2013

Scheme of Evaluation:

A	Final University Exam	70 Marks
B	Institute – Mid-term Exam	30 Marks
C	Internal Evaluation (CEC)	30+20 = 50 Marks

Session Plan: The course duration is of 36 sessions of 75 minutes each i.e. 45 hours.