

5043 -- PRINCIPLES OF MATERIALS MANAGEMENT									
Teaching Schedule Per Week			Progressive Assessment		Examination Schedule (Marks)				
Lectures	Practical	Credit			Theory		Practical Ex.	Total	
3	2	5	25	25	3 Hrs	100	Oral-25	175	
Pre-requisite		Source	Semester	Theory	Test	Total	TW	PR	Gr Total
Nil		MEC							

RATIONALE:- A technician in a industry. Thorough exposure to various aspects in material management will make it possible for the technicians to obtain maximum benefits from every rupee spent on materials. It will also help in making optimum utilisation of scarce resources available. The topic on international buying is introduced so that the student completing this course successfully will be in addition to other aspects of materials management, able to process import related aspects in material and spares purchases.

COURSE CONTENTS

	Hrs	Mks
1.MEANING AND DEFINITION OF MATERIALS MANAGEMENT Role of materials management; objectives & functions; Integrated approach to materials management; Major material activities.	3	8
2.PURCHASE SYSTEM AND PROCEDURES Role of purchasing; Objectives and functions; Purchasing organisation; inputs to purchasing; Restraints and factors affecting purchases; Purchasing decisions, Suppliers selections; Timing of purchases; Price determination; Quality and quantity; Purchase procedure, forms and records, Supplier or vendor, Evaluation and rating, Computerise purchasing system, Legal aspects of purchasing.	12	20
3.INVENTORY MANAGEMENT Concept of Inventory, Importance of Inventory Management, Functions of Inventory, Types of inventories, Symptoms of poor Inventory management, Cost related to Inventory, Deterministic Inventory models a) Instantaneous replenishment models with and without shortages. b) Replenishment of stock with finite rate with and without shortages. Model with quantity discounts, Selective Inventory Management	12	20
4.STORES MANAGEMENT Stores functions, Stores organisation, Stores systems and procedures, Identification system, receipt system, Storage system, Issue system, Stores accounting and verification systems. Stores address system, Store location and layout, Store equipment, inter-relation of stores with production, purchase and other departments.	8	15
5. STANDARDISATION, CODIFICATION AND VARIETY REDUCTION Introduction, classification of materials, codification systems, objectives, features of codification system, codification Standardisation and variety reduction.	5	10
6. RIGHT MODE OF TRANSPORTATION Transport cost, choice of mode of transport, Railways, Road transport, Water transport, Air transport, Containerisation, Ways of transport cost reduction	2	9
7. INTERNATIONAL BUYING Imports, import policy, Classification of Importers, Objectives of control, fees and validity of licence, Preliminary formalities, Source selection, Licensing procedures, Letter of credit, Documentation, bill of lading, Custom Clearance, Problems in imports.	5	8
8. COMPUTER APPLICATION IN MATERIALS MANAGEMENT	1	10
Total	48	100

Term Work

1. Study/Design of purchase system in an organisation.
2. Study of different inventory management systems.
3. Study of procedures required for international buying.
4. Study of legal aspects of buying.
5. Study of applications of computers to materials management.
6. An assignment of transport cost reduction.

REFERENCE BOOKS:

1. Materials Management and Materials handling by S.C. Sharma.
2. Purchase and Materials Management by P. Gopalkrishnan
3. Industrial Engineering and Management Systems by S. Dalela & Mansoor Alli