

Devi Ahilya University, Indore, India Institute of Engineering & Technology				I Year M.E.(Industrial Engineering and Management) Full Time			
Subject Code & Name	Instructions Hours per Week			Credits			
IMR2C2 MATERIALS MANAGEMENT	L	T	P	L	T	P	Total
	3	1	1	3	1	1	5
Duration of Theory Paper: 3 Hours							

Objective and Pre requisites: To inbuilt the concepts of Material handling and purchase procedure of an organization. To impart the basics of standardization & stores management within an organization. To concrete the concepts of inventory management for effective decision making related to material & inventory.

COURSE CONTENTS

UNIT-1

Introduction:

Objective of materials management, field and scope of material management, general analysis material quality, material planning programming.

UNIT-2

Standardization: Concepts and Procedure,

Simplification: Concepts and Procedure,

Codification: Concepts and Procedure.

UNIT-3

Purchase Management:

Problems of purchasing , organization of purchasing Deptt, purchase procedures , placing of orders , inspection and testing , purchasing for mass production , purchase contract , make or buy decision , material import , DGS & D rate contract.

UNIT-4

Stores Management:

Stores organization, methods of storing, record – keeping & checking, issue methods, stores layout.

UNIT-5

Inventory Management:

Various inventory models, quantity discounts, shortages, instantaneous production with back orders, fixed time mode, single period model of profit maximization with time independent costs, lead time , re-order point , Buffer stock, models with price breaks, selective control of inventory, POQ system.

BOOKS RECOMMENDED:

- [1]. Lee & Dobler, *Material management*. Tata Mc.Graw Hill, 1990
- [2]. Arnold J.R Tony & Stephen N. Chapman, *Introduction to Material management*. 2003
- [3]. Gopal Krishnan, *Material Management*.1992

LABORATORY EXPERIMENTS:

1. Cases related to material handling problem in the plant or organization.
2. Cases related to the problem of Standardization, simplification, codification.
3. Cases related to Problems of purchasing.
4. Cases related to inspection and testing, purchasing for mass production.
5. Cases related to stores layout.
6. Cases related to various inventory models.
7. Determination of EOQ from the given data & its comparison with data of the industry.