

## **BA5026 MATERIALS MANAGEMENT**

### DETAILED SYLLABUS

#### **OBJECTIVE**

Understand how material management should be considered for profitability

#### **UNIT I INTRODUCTION**

Operating environment-aggregate planning-role, need, strategies, costs techniques, approaches-master scheduling-manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production plan

#### **UNIT II MATERIALS PLANNING**

Materials requirements planning-bill of materials-resource requirement planning-manufacturing resource planning-capacity management-scheduling orders-production activity control-codification.

#### **UNIT III INVENTORY MANAGEMEN**

Policy Decisions-objectives-control -Retail Discounting Model, Newsvendor Model; EOQ and EBQ models for uniform and variable demand With and without shortages -Quantity discount models. Probabilistic inventory models.

#### **UNIT IV PURCHASING MANAGEMENT**

Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting-buying seasonal commodities-purchasing under uncertainty-demand management-price forecasting-purchasing under uncertainty-purchasing of capital equipment-international purchasing

#### **UNIT V WAREHOUSE MANAGEMENT**

Warehousing functions – types - Stores management-stores systems and procedures-incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management -operational efficiency-productivity-cost effectiveness-performance measurement.

## REFERENCES

1. J.R.Tony Arnold, Stephen N. Chapman, Lloyd M. Clive, Materials Management, Pearson, 2012.
2. P. Gopalakrishnan, Purchasing and Materials Management, Tata McGraw Hill, 2012
3. A.K.Chitale and R.C.Gupta, Materials Management, Text and Cases, PHI Learning, 2nd Edition, 2006
4. A.K.Datla, Materials Management, Procedure, Text and Cases, PHI Learning, 2nd Edition, 2006
5. Ajay K Garg, Production and Operations Management, Tata McGraw Hill , 2012
6. Ronald H. Ballou and Samir K. Srivastava, Business Logistics and Supply Chain Management, Pearson education, Fifth Edition
7. S. N. Chary, Production and Operations Management, Tata McGraw Hill , 2012