

# MANAGEMENT SCIENCE

**COURSE CODE: 15HM1102**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

## **Course Objective**

To familiarize the students with the concepts of management and to provide basic insight about the various facets of this subject with other social sciences and its outcome.

## **Course Outcomes**

- CO-1:** Develop an understanding towards the concepts and evolution of management and organization structures and to identify the steps in decision making process.
- CO-2:** List out the factors influencing plant location and layout, Application the techniques of quality control and inventory management. Apply the concept to plan a schedule of project and to review with techniques of PERT and CPM.
- CO-3:** Analyze the functions of HR management and identify the different HR practices.
- CO-4:** Define the concept of Marketing Management, Product life cycle, plan effective marketing strategies along with channels of distribution.
- CO-5:** To elucidate the concept of financial management, working capital management and various capital budgeting techniques.

## **UNIT-I: Introduction to Management**

**(10 lectures)**

Concept-nature and importance of management- functions of management- evolution of management thought- theories of motivation- decision making process -organization structure- principles of organization – types of organization structure

## **UNIT-II: Operations & Project Management**

**(14 lectures)**

Principles and types of plant layout- work study- statistical quality control- control charts (R Chart, P Chart & C Chart- Simple numerical problems) – materials management- Need for Inventory Control- EOQ, ABC Analysis (Simple numerical Analysis).  
Project Management: Project planning and control - Project life cycle- Development of network- Difference between PERT and CPM - Identifying critical path.

## **UNIT-III: Human Resource Management**

**(10 lectures)**

Concept of HRM - Functions of HR Manager- Job Evaluation and Performance Appraisal, Competency Management, HR Planning, Training and Development.

## **UNIT-IV: Marketing Management**

**(10 lectures)**

Marketing Management - Functions of Marketing Management- Marketing mix- Marketing strategies based on product life cycle - Channels of Distribution.

## **UNIT-V: Financial Management**

**(10 lectures)**

Introduction to financial management, nature, scope, and objectives  
Working Capital Management: Preparation of changes in working capital statement and Fund flow statement.  
Capital Budgeting: Meaning of capital budgeting, need for capital budgeting – Capital budgeting decisions - Methods of Capital Budgeting: Payback Method, Accounting Rate of Return, IRR and Net Present Value Method (simple problems).

### TEXT BOOKS

S.No	Author	Title	Edition	Publisher	Year
1	B.V.R. Naidu, P.G. Ramanujam, P.V. Rama Sastry	Management Science	1 <sup>st</sup>	Himalaya Publisher	2013
2	P.Vijaya Kumar & N.Appa Rao	Management Science	1 <sup>st</sup>	Cengage Publishers	2012
3	A.R. Aryasri	Management Science	4 <sup>th</sup>	Tata McGraw- Hill	2009

### REFERENCES

S.No	Author	Title	Edition	Publisher	Year
1	O. P. Khanna	Industrial Engineering & Management	17 <sup>th</sup>	Dhanpat Rai	2010
2	Martand Telsang	Industrial Engineering & Production Management	2 <sup>nd</sup>	S. Chand & Company	2008
3	Robert L. Mathis & John H. Jackson	Human Resource Management	12 <sup>th</sup>	Cengage Learning	2007