

Management Science

CourseCode	23HS1704	Year	IV	Semester	I
Course Category	Management Course– II	Branch	ECE	Course Type	Theory
Credits	2	L-T-P	2-0-0	Prerequisites	Managerial Economics and Financial Analysis
ContinuousInternal Evaluation	30	Semester End Evaluation	70	Total Marks	100

Course Outcomes		
Upon successful completion of the course, the student will be able to		BL
CO1	Explain the fundamental concepts of management, human resource management, marketing, operations management, and project management, along with their roles in organizational effectiveness.	L2
CO2	Apply management principles, human resource practices, marketing strategies, operations techniques, and project management tools to solve real-world organizational problems.	L3
CO3	Analyze organizational and managerial problems using management theories, marketing and HR strategies, operations techniques, and quantitative tools such as inventory models and project management methods.	L3
CO4	Evaluate managerial decisions, business strategies, and project outcomes by considering efficiency, effectiveness, and organizational objectives across various functional areas.	L4

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3-High, 2: Medium, 1:Low)													
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2
CO1						1	1	2	2	2	2		1
CO2		2				1		2	2	3	2		1
CO3		3	2	1				1	1	3	2		1
CO4		2	1					1	2	3	3		1
Avg.		2	1	1		1	1	2	2	3	2		1

Syllabus		
UnitNo.	Contents	Mapped CO
1	Introduction to Management: Concepts of Management and organization- nature, importance and Functions of Management, Systems approach to Management - Taylor's Scientific Management Theory, Fayol's Principles of Management, Mayo's Hawthorne Experiments, Maslow's Theory of Human Needs, Douglas McGregor's Theory X and Theory Y, Herzberg's Two-Factor Theory of Motivation, Leadership Styles.	CO1-CO4
2	Human Resources Management: Concepts of Human Resource Management, Basic functions of HR Manager - Manpower planning, Recruitment, Selection, Training and Development, Placement, Wage and Salary Administration, Promotion, Transfer, Separation, Performance Appraisal, Grievance Handling and Welfare Administration, Job Evaluation and Merit Rating	CO1-CO4

3	Marketing Management: Evolution of Marketing, Functions of Marketing Selling Vs Marketing, 4 P's of Marketing – Product Mix - Product Life Cycle – Place Mix – Channels of Distribution – Price Mix – Pricing Methods – Promotion Mix – Tools of Promotions.	CO1-CO4
4	Operations Management Principles and Types of Plant Layout-Methods of production (Job, batch and Mass Production), Work Study -Basic procedure involved in Method Study and Work Measurement, Objectives, need for Inventory control, EOQ, ABC Analysis, Purchase Procedure, Stores Management and Stores Records. Total Quality Management (TQM), Six sigma concept, Statistical Quality Control, control charts for variables and attributes (simple Problems), Acceptance Sampling	CO1-CO4
5	Project Management (PERT/CPM): Network Analysis, Programme Evaluation and Review Technique (PERT), Critical Path Method (CPM), Identifying critical path, Probability of Completing the project within given time, Project Cost Analysis, Project Crashing. (Simple problems).	CO1-CO4

Learning Resources	
Text Books	
1. Aryasri Management Science, 3 rd Ed. Mc-Graw Hill, 2008. 2. Rajesh C. Jampala, P. Adi Lakshmi, Management Science, 1 st Ed. Duvuri Publications, Machilipatnam, 2010.	
Reference Books	
1. Kotler Philip & Kevin Lane Keller, Marketing Management . 12 th Ed., PHI, 2005. 2. Koontz & Weihrich, Essentials of Management, 6 th Ed., TMH, 2005. 3. Stoner, Freeman, Gilbert, Management, 6 th Ed, Pearson Education, New Delhi, 2004.	
e- Resources & other digital material	
1. https://www.ocw.mit.edu/courses/15-320-strategic-organizational-design-spring-2011/ 2. https://onlinecourses.nptel.ac.in/noc26_mg72	