

Scheme of Course Work

Course Title	Management Science
Course Code	15HM 1102
Program	B.Tech
Semester	V
Prerequisites	Managerial Economics & Financial Accounting

Course Outcomes

1	Develop an understanding towards the concepts and evolution of management and organization structures and to identify the steps in decision making process.
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.
3	Analyze the functions of HR management and identify the different HR practices.
4	Define the concept of Marketing Management, Product life cycle, plan effective marketing strategies along with channels of distribution.
5	To elucidate the concept of financial management, working capital management and various capital budgeting techniques.

Course Outcomes versus Program Outcomes

CO's	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	M								M	M	M	M
CO2								M	M	S	S	
CO3									M	M	S	
CO4											M	
CO5											M	S

S-strongly correlated M-Moderately correlated Blank- No correlation

Week	Topics/Contents	CO	Sample Questions	Teaching learning strategy	Assessment Method & Schedule
1	Introduction to Management Concept-nature and importance of management- functions of management- evolution of management thought	1	1. Explain the nature and scope of management? 2. What are the functions of management?	<ul style="list-style-type: none"> Lecture Discussion 	Assignment-I/Quiz-I/Mid-I
2	Evolution of management thought theories of motivation-	1	1. Scientific management theory?	<ul style="list-style-type: none"> Lecture Discussion 	Assignment-I/Quiz-I/Mid-I

	decision making process -organization structure-		2. Theories of management?		
3	Principles of organization – types of organization structure	1	1.Principles of Organization 2.Line & Staff Org Structure	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-I/Quiz-I/Mid-I
4	Operations & Project Management- Principles and types of plant layout- work study- statistical quality control- control charts (R Chart, P Chart & C Chart- Simple numerical problems)	2	1.Principles of plant layout 2. Procedure for Method study 3.Procedure for work measurement	<ul style="list-style-type: none"> • Lecture • Discussion • Problem Solving 	Assignment-I/Quiz-I/Mid-I
5	(R Chart, P Chart & C Chart- Simple numerical problems) materials management- Need for Inventory	2	1.Numerical Problem 2. Inventory models	<ul style="list-style-type: none"> • Lecture • Discussion • Problem Solving 	Assignment-I/Quiz-I/Mid-I
6	Control- EOQ, ABC Analysis (Simple numerical Analysis). Project Management: Project planning and control	2	1.Algebraic method for determination of EOQ 2. Project Management	<ul style="list-style-type: none"> • Lecture • Discussion • Problem Solving 	Assignment-I/Quiz-I/Mid-I
7	Project life cycle- Development of network-Difference between PERT and CPM -Identifying critical path.	2	1.Phases of project life cycle 2.Differnece between PERT & CPM	<ul style="list-style-type: none"> • Lecture • Discussion • Problem Solving 	Assignment-I/Quiz-I/Mid-I
8	Numerical Problems	2	1.Numerical problems on crashing of network 2. Determination of optimum project duration and schedule	<ul style="list-style-type: none"> • Problem Solving 	Assignment-I/Quiz-I/Mid-I
9	MID TEST-I				
10	Human Resource Management Concept of HRM - Functions of HR Manager	3	1.Discuss the functions performed by HR manager 2. What are the differences between Personnel & HR management	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II

11	Job Evaluation and Performance Appraisal	3	1.Methods of Job Evaluation 2. Methods of performance appraisal	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
12	Competency Management, HR Planning, Training and Development	3	1. What is competency management? Explain 2. Difference between training and development.	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
13	Marketing Management Marketing Management - Functions of Marketing Management- Marketing mix	4	1. Define marketing. Explain the functions of marketing. 2. What is marketing mix.	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
14	Marketing strategies based on product life cycle - Channels of Distribution.	4	1. Discuss the marketing strategies of product life cycle.	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
15	Financial Management Introduction to financial management, nature, scope, and objectives Working Capital Management: Preparation of changes in working capital statement and Fund flow statement.	5	1. Discuss the nature and scope of financial management. 2. What is working capital.	<ul style="list-style-type: none"> • Lecture • Discussion • Problem Solving 	Assignment-II/Quiz-II/Mid-II
16	Capital Budgeting: Meaning of capital budgeting, need for capital budgeting – Capital budgeting decisions -	5	1. What is capital? What are the types of capital? 2. What is capital budgeting?	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
17	Methods of Capital Budgeting: Payback Method, Accounting Rate of Return, IRR and Net Present Value Method (simple problems).	5	1.Procedure for ARR 2.Procedure for determination of IRR	<ul style="list-style-type: none"> • Lecture • Discussion • Problem Solving 	Assignment-II/Quiz-II/Mid-II
18	MID EXAM -2				