



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE - 560109

DEPARTMENT OF MECHANICAL ENGINEERING

SESSION: 2022-2023 (ODD SEMESTER)

LESSON PLAN

NAME OF THE STAFF : Dr. P N Jyothi

SUBJECT CODE/TITLE : 18ME56/OPERATIONS MANAGEMENT

SEMESTER/YEAR : V SEM /III YEAR

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Delivery Date
<b>MODULE 1</b>							
1	Introduction, Functions within business organizations	L+D	BB+LCD	1	1	10/10/22	12/10/22
2	The operation management function, Classification of production systems	L+ D	BB+LCD	1	2	11/10/22	13/10/22
3	Productivity, factors affecting productivity.	L+D	BB+LCD	1	3	12/10/22	18/10/22
4	Decision Making: The decision process, characteristics of operations decisions, use of models	L+PS	BB+LCD	1	4	13/10/22	18/10/22
5	<b>Class Activity 1 - Decision Making Process</b>	D	BB	1	-	17/10/22	19/10/22
6	Decision Making Problems related to Uncertainty	L+ D	BB+LCD	1	5	18/10/22	31/10/22
7	Decision Making using Linear Programming	L+PS	BB	1	6	19/10/22	31/10/22
8	Numerical Problems on LPP formation and solving the LPP by Graphical Method	L+PS	BB	1	7	20/10/22	10/11/22
9	Numerical Problems on LPP formation and solving the LPP by Graphical Method	L+PS	BB	1	8	25/10/22	10/11/22
10	Numerical Problems on LPP formation and solving the LPP by Graphical Method	L+PS	BB	1	9	27/10/22	10/11/22
11	Decision Making Break Even Analysis	L+ D	BB	1	10	31/10/22	14/11/22
12	Decision Making Break Even Analysis	L+PS	BB	1	11	2/11/22	16/11/22
13	Decision Making Break Even Analysis	L+PS	BB	1	12	3/11/22	16/11/22
14	Numerical Problems on BEA	L+ PS	BB	1	13	10/11/22	17/11/22


15	Decision Making using Decision tree	L+PS	BB	1	14	14/11/22	18/11/22
16	Decision Making using Decision tree	L+PS	BB	1	15	15/11/22	19/11/22
17	<b>Class Activity 2</b> – Problem Solving on LPP, BEA and DT	PS	BB	1	-	21/11/22	22/11/22
<b>MODULE 2</b>							
18	Forecasting: Steps in forecasting process,	L	BB+LCD	1	16	22/11/22	24/11/22
19	Approaches to forecasting	L	BB+LCD	1	17	23/11/22	28/11/22
20	Forecasts based on judgment Analysis	L	BB+LCD	1	18	24/11/22	28/11/22
21	Forecasts based on opinion Analysis	L	BB+LCD	1	19	28/11/22	28/11/22
22	<b>Class Activity 3-</b> Concepts of Forecasting- PPT presentation	D	BB	1	-	29/11/22	29/11/22
23	Numerical Problems -Time Series Method	L	BB	1	20	30/11/22	29/11/22
24	Numerical Problems -Time Series Method	L+PS	BB	1	21	1/12/22	29/11/22
25	Numerical Problems-Method of least Squares	L+PS	BB	1	22	5/12/22	30/11/22
26	Numerical Problems-Method of least Squares	L+PS	BB	1	23	6/12/22	30/11/22
27	Numerical Problems-Regression and correlation Method	L+PS	BB	1	24	7/12/22	30/11/22
28	Numerical Problems-Regression and correlation Method	L+PS	BB	1	25	8/12/22	30/11/22
29	Numerical Problems-Exponential smoothing	L+PS	BB	1	26	15/12/22	1/12/22
30	Numerical Problems-Exponential smoothing			1	27	19/12/22	1/12/22
31	<b>Class Activity 4-</b> Problem Solving on Forecasting	L	BB	1	-	20/12/22	2/12/22
<b>MODULE 3</b>							
32	Capacity & Location Planning: Importance of capacity decisions, defining and measuring capacity	L	BB+LCD	1	28	2/12/22	5/12/22
33	Determinants of effective capacity, determining capacity requirement	L	BB+LCD	1	29	22/12/22	6/12/22
34	Developing capacity alternatives	L	BB+LCD	1	30	24/12/22	7/12/22
35	Evaluating alternatives	L+PS	BB	1	31	26/12/22	14/12/22
36	Need for location decisions, nature of locations decisions	L+PS	BB	1	32	27/12/22	15/12/22
37	<b>Class Activity 5-</b> Plant Location-A case study	L	BB	1	-	28/12/22	20/12/22
38	General procedure for making locations decisions.	L+PS	BB	1	33	29/12/22	21/12/22
39	Decisions evaluating locations, facilities layout – need for layout decisions	L+D	BB+LCD	1	34	31/12/22	24/11/22
40	Types of processing	L	BB+LCD	1	35	2/1/23	2/1/23
41	<b>Class Activity 6-</b> Plant Layout- A case study	L	BB	1	-	3/1/23	3/1/23
<b>MODULE 4</b>							
42	Aggregate Planning & Master Scheduling: Aggregate planning – Nature and scope of aggregate planning	L+D	BB+LCD	1	36	4/1/23	4/1/23

43	Strategies of aggregate planning	L+D	BB+LCD	1	37	5/1/23	5/1/23
44	Techniques for aggregate planning – graphical and charting techniques	L+D	BB+LCD	1	38	9/1/23	9/1/23
45	Numerical Problems	L+PS	BB	1	39	10/1/23	10/1/23
46	Numerical Problems	L+PS	BB	1	40	16/1/23	10/1/23
47	Numerical Problems	L+PS	BB	1	41	17/1/23	10/1/23
48	<b>Class Activity 7-</b> Problem Solving on aggregate planning	L+PS	BB	1	-	23/1/23	12/1/23
49	Mathematical techniques	L+D	BB+LCD	1	42	24/1/23	12/1/23
50	Numerical Problems	L+PS	BB	1	43	24/1/23	13/1/23
51	The master production schedule, Master scheduling process	L+D	BB+LCD	1	44	23/1/23	13/1/23
52	Master scheduling Methods	L+D	BB+LCD	1	45	23/1/23	14/1/23
53	<b>Class Activity 8 -</b> Preparation of MPS- Chart Preparation	L	BB	1	-	25/1/23	14/1/23
<b>MODULE 5</b>							
54	Material Requirement Planning (MRP): Dependent versus independent demand, an overview of MRP – MRP inputs and outputs	L+D	BB+LCD	1	46	25/1/23	14/1/23
55	MRP processing, ERP capacity requirement planning	L+D	BB+LCD	1	47	27/1/23	14/1/23
56	Benefits and limitations of MRP	L+D	BB+LCD	1	48	27/1/23	
57	Material Requirement Planning (MRP) problems	L	BB	1	49	pp1	16/1/23
58	Material Requirement Planning (MRP) problems	L	BB	1	50		6
59	<b>Class Activity 9 -</b> A case study on MRP	L	BB	1	-	presentation	18/1/23
60	Purchasing and Supply Chain Management (SCM): Introduction, Importance of purchasing and SCM	L+D	BB+LCD	1	51	28/1/23	
61	The pro Process, Concept of tenders,	L+D	BB+LCD	1	52	28/1/23	
62	Approaches to SCM, Vendor development	L+D	BB+LCD	1	53	28/1/23	
63	<b>Class Activity 10-</b> Related to SCM for different Products	L	BB	1	-	28/1/23	

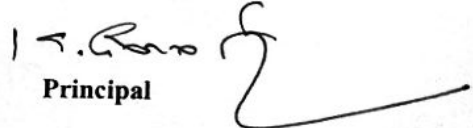
Total No of Lecturer Hours=53

Total No of Activity & Tutorial Hours= 10

	<b>Mode of Assignment and instructions*</b>	<b>Date</b>
<b>Assignment 1</b> 15M( 5M each)	<b>Class Activity-1-</b> Decision Making Process-Chart Preparation <b>Class Activity-2 -</b> Problem Solving on LPP, BEA and DT <b>Class Activity-3-</b> Forecasting- PPT presentation	27/10/21
<b>Assignment 2</b> 15M( 5M each)	<b>Class Activity-4-</b> Problem Solving on forecasting <b>Class Activity-5-</b> Plant Location-A case study <b>Class Activity-6-</b> Plant Layout- A case study	30/11/21
<b>Assignment 3</b> 20M( 5M each)	<b>Class Activity-7-</b> Problem Solving on aggregate planning <b>Class Activity-8-</b> Preparation of MPS- Chart Preparation <b>Class Activity-9-</b> A case study on MRP <b>Class Activity-10-</b> SCM for different Products- A case study	15/12/21

  
Course In charge

  
Head of the Department

  
Principal