

Programme: MMS - Operations Semester: III Period: July'19 - Nov'19

Course Code: MMS-3-OP-C-04

Name of the subject: Manufacturing Resource Planning & Control

Maximum marks: 100 (60+40) No. of Sessions: 13 (total 40 hrs)

Name of the Faculty: Sekhar Velagaleti

Mobile No: 9819227793 Email: svelagaleti@vpmthane.org

Program Outcomes (PO) 1. Nurture leadership skills, tear

- $1.\ \mbox{Nurture}$ leadership skills, team-membership skills and mutual trust.
- 2. Demonstrate decision-making ability.
- 3. Ability to develop culture of technology-usage.
- 4. Inculcate social sensitivity among students.
- 5. Integrate and apply business knowledge and management techniques for problem-solving / analytical skills.

Course Outcomes (CO)

- 1. Apply various tools and techniques for resource Planning & Control in operations
- 2. Analyse different case studies in Operations Planning & Control for effective performance
- 3. Design the Optimum operation layouts
- 4. Understand the application of MRP & ERP systems

Reference Books:

- 1. Operations Management—B. Mahadevan
- 2. Production Operations Management Chase and Jacob

A. Plan:

Session No.	PI. Date	Topic	Ref. Study Material	Course Outcomes
1	1-7- 19	Overview of Operations Planning & Control, Present Business Environment	Ppt- Self & Ref Book- 1	Basic understanding
2	8-7- 19	Various Manufacturing Resources, importance of their planning & control	Ppt- Self & Ref Book- 1	Basic understanding
3	15-7- 19	Functions of Operations Planning & Control	Ppt- Self & Ref Book- 1	Basic understanding
4	22-7- 19	Hierarchy of Production Planning Overview and linkage to business plans. Internal Test- I	Ppt- Self & Ref Book- 1	Basic understanding
5	29-7- 19	Concepts of aggregation and APP Master production scheduling (MPS) module (I) Need objectives functions flow of materials in different manufacturing scenarios.	Ppt- Self & Case study, Internet Ref will be given later	Analysis & Application of Tools & Techniques
6	5-8- 19	MPS module (II), planning horizon time periods, order management, safety and hedges, effect of changing MPS.	Ppt- Self & Case study, Internet Ref will be given later	Analysis & Application of Tools & Techniques
7	12-8- 19	Line Balancing, Quantitative models for layout.	Ppt- Self & Case study	Analysis & Application of Tools & Techniques
8	19-8- 19	Internal Test- II Capacity Management: Introduction to capacity, capacity management, 1) Capacity expansion strategies 2) Rough out capacity planning RCCP 3) CRP-Capacity requirement Planning 4) Scheduling strategies 5) Production smoothly policies	Ppt- Self & Case study, Internet Ref will be given later	Analysis & Application of Tools & Techniques
9	26-8- 19	MRP systems, Dependent and Independent Demands, Types of BoM Manufacturing Resource planning MRP: Introduction, Roles	Ppt- Self & Case study, Internet Ref	Understanding MRP sys



Dr. V. N. Bedekar Institute of Management, Thane **Teaching Plan (MMS) Academic Year (2019-2020)**

		functions frame work of information flow in MRP , Relation of MRP with demand management and capacity management manufacturing calendar.	will be given later	
10	2-9- 19	Internal Test- III Transition of MRPI to MRPII closed loop MRP, comparison between MRP1 & MRP II benefits.	Ppt- Self & Case study, Internet Ref will be given later	Understanding MRP sys
11	9-9- 19	MRP II, relationship to demand management and capacity management, comparison of MRP I and MRP II	Ppt- Self & Case study, Internet Ref will be given later	Understanding MRP sys
12	16-9- 19	ERP systems, need, functions and utility to business, use in decision making ERP – Need, function & utility to business ERP-SAP-PPC modules. Reports, Interpretation variance. Analysis – use in decision making.	Ppt- Self & Case study, Internet Ref will be given later	Understanding ERP sys
13	23-9- 19	Presentations		Student Evaluation

B. Practical Approach: Other activities

Sr. No.	Activity Name	Topic Covered	Learning outcomes	Source
1	Case study (current affairs, Industry context)	Yes	Analytical Abilities	Internet
2	Academic Projects	Yes	Applicati on	Self generated
3	Group Discussion	Yes	Communi cation	Literature
4	Role Play			
5	Industry Visit			
6	Business Quiz / Business News sharing			
7	Videos / Simulation	Yes	Awarene ss	Internet
8	Use of Software and Labs			
9	Any other activity	Presentatio ns		

C. Innovative pedagogy adopted: Nil

Interactive sessions and practical oriented (general practice)

Prepared by: Reviewed by: Approved by:

Dr. V. N. Bedekar Institute of Management, Thane Teaching Plan (MMS) Academic Year (2019-2020)

Faculty Specialisation ADC

Date:	Date:	Date:

A. Execution:

Session No.	Actual Date	Topic Covered	Attendance <u>%</u>	Evaluation Method	Case Study Ref.	Quiz Ref.	CR Sign

B. Evaluation:

Component	Details	Marks
Presentations & Viva	Mandatory	5+5
Class Test (3 for MMS)	Mandatory (MCQ, Descriptive,. Etc)	20
Assignments / Others	Mandatory	5
Participation/Attendance	Mandatory	5
Final Exam	Mandatory	60

C. Student Performance Analysis:

Avg. Attendance	Avg. Internal Marks	% Failed in Internals	Avg. Final Marks	% Failed in Final	No. of best students > 80%	No. of students needs improvement



Dr. V. N. Bedekar Institute of Management, Thane Teaching Plan (MMS) Academic Year (2019-2020)

D. Attainment:

	CO1	CO2	CO3	
PO1				
PO1 PO2 PO3				
PO3				

Comments / Suggestions / Recommendations:

Suggestions (if any) to students on subject related Certificate/Diploma or Add-on program: -

Signature of Faculty

Signature of the Co-ordinator / ADC