



<b>PROGRAM</b>	<b>Master of Business Administration</b>
<b>SEMESTER</b>	<b>3</b>
<b>COURSE TITLE</b>	<b>Management of Manufacturing Systems</b>
<b>COURSE CODE</b>	<b>04MB0347</b>
<b>COURSE CREDITS</b>	<b>3</b>
<b>COURSE DURATION</b>	<b>42 Hrs (42 sessions of 60 minutes each)</b>

**COURSE OUTCOMES:**

- \* Understand facility, capacity, and layout planning.
- \* Apply the concepts of production planning and control.
- \* Analyze the production planning and control.
- \* Evaluate the inventory planning and control.
- \* Critically examine demand forecasting and project management

**COURSE CONTENTS:**

<b>Unit No</b>	<b>Unit / Sub Unit</b>	<b>Sessions</b>
<b>I</b>	Facility planning - factors affecting selection of plant location, plant design, plant layout, criteria for good layout. Capacity planning- analysis of designed capacity, installed capacity, commissioned capacity, utilized capacity, factors affecting productivity. Facility layout planning – Assignment model, load distance analysis, closeness ratings.	10
<b>II</b>	Steps in PPC process mapping, preparation of process mapping and feedback control for effective monitoring. Aggregate production planning, production planning strategies, Disaggregating the aggregate plan, Materials Requirement Planning (MRP), MRP-II, Supply chain management, Operation scheduling, prioritization.	8
<b>III</b>	EOQ models- with and without shortages, price breaks, effect of quantity discount – selective inventory control techniques – ABC, FSN, VED etc. Types of inventory control – Perpetual, two-bin and periodic inventory system – JIT.	8
<b>IV</b>	Demand forecasting – Quantitative and qualitative techniques, measurement of forecasting errors, numerical problems.	8
<b>V</b>	Project management – its role in functional areas of management, network diagrams, CPM and PERT techniques, crashing, resource levelling and resource smoothing.	8

**EVALUATION:**

The students will be evaluated on a continuous basis and broadly follow the scheme given below:

	<b>Component</b>	<b>Weightage</b>
A	Continuous Evaluation Component (Assignments / Quizzes / Class Participation etc.)	20% (C.E.C.)
B	Internal Assessment	30% (I.A.)
C	End-Semester Examination	50% (External Assessment)



**SUGGESTED READINGS:**

**Text Books:**

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year
T-01	S.N.Chary	Production and Operations management	SIE, TMH2007	3rd edition, 2007
T-02	R.Pannererselvam	Production and operations management	PHI, 2008.	2nd edition, 2008

**Reference Books:**

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year
R-01	James.B.Dilworth	Operations management-Design, planning and control for manufacturing and services	McGraw hill, Inc Management series 1992	1992
R-02	Melnyk.Denzler	Operations management-A value driven approach	Irwin McGraw-Hill 1996.	1996.
R-03	Lee.J.Krajewski, L.P.Ritzman, M.K.Malhotra	Operations management – Process and value chains	PHI	8th edition, PHI, 2007.
R-04	R.B.Chase, N.J.Aquilano, F.R.Jacobs	Operations management – for competitive advantage	SIE, TMH 2007	11th edition, 2007
R-05	Kanishka Bedi	Production and Operations management	Oxford higher Education 2007.	2nd edition, Oxford higher Education 2007.