

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

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:

Unit No	Unit / Sub Unit	Sessions
I	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
II	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
III	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
IV	Demand forecasting – Quantitative and qualitative techniques, measurement of forecasting errors, numerical problems.	8
V	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:

	Component	Weightage
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.Malhothra	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.