

MBA II Year	MBA-E325/425		Semester-III/IV		
	Production Planning and Control				
Time Allotted for End Semester Examination	Marks Allotted for Internal Assessment	Marks Allotted for End Semester Examination (ESE)	Maximum Marks (MM)	Total Credits	Maximum Hours
3 Hrs.	30 (20+10)	70	100	03	40

OBJECTIVE: To understand the various components and functions of production planning and control such as work study, product planning, process planning, production scheduling, Inventory Control. • To know the recent trends like manufacturing requirement Planning (MRP II) and Enterprise Resource Planning (ERP)..

- Introduction Objectives and benefits of planning and control-Functions of production control-Types of production job- batch and continuous-Product development and design-Marketing aspect - Functional aspects- Operational aspect-Durability and dependability aspect-aesthetic aspect. Profit consideration-Standardization, Simplification & specialization-Break even analysis-Economics of a new design. **(8 hours)**
- Work Study Method study, basic procedure-Selection-Recording of process - Critical analysis, Development - Implementation - Micro motion and memo motion study - work measurement - Techniques of work measurement - Time study - Production study - Work sampling - Synthesis from standard data - Predetermined motion time standards. **(8 hours)**
- Product Planning And Process Planning Product planning-Extending the original product information-Value analysis-Problems in lack of product planning-Process planning and routing-Pre requisite information needed for process planning- Steps in process planning-Quantity determination in batch production-Machine capacity, balancing- Analysis of process capabilities in a multi product system **(8 hours)**
- Production Scheduling Production Control Systems-Loading and scheduling-Master Scheduling-Scheduling rules-Gantt charts-Perpetual loading-Basic scheduling problems - Line of balance - Flow production scheduling- Batch production scheduling-Product sequencing - Production Control systems-Periodic batch control- Material requirement planning kanban – Dispatching-Progress reporting and expediting-Manufacturing lead time-Techniques for aligning completion times and due dates. **Case Study1:** Bharat Tobacco: vendor selection and vendor rating **(8 hours)**
- Inventory Control And Recent Trends In PPC- Inventory control-Purpose of holding stock-Effect of demand on inventories-Ordering procedures. Two bin system -Ordering cycle system-Determination of Economic order quantity and economic lot size- ABC analysis-Recorder procedure-Introduction to computer integrated production planning systems- elements of JUST IN TIME SYSTEMS Fundamentals of MRP II and ERP. **Case Study2:** Health Pharma: managing supply chain:Need of ERP system **(8 hours)**

SUGGESTED READINGS:

1. Samson Eilon, “*Elements of Production Planning and Control*”, Universal Book Corpn.1984
2. Elwood S.Buffa, and Rakesh K.Sarin, “*Modern Production / b Operations Management*”, 8th Ed. John Wiley and Sons, 2000. 3. Kanishka Bedi, “*Production and Operations management*”, 2 nd Edition, Oxford university press, 2007.
3. Melynk, Denzler, “*Operations Management – A value driven approach*” Irwin Mcgrawhill.
4. Norman Gaither, G. Frazier, “*Operations Management*” Thomson learning 9th edition IE, 2007
5. K.C.Jain & L.N. Aggarwal, “*Production Planning Control and Industrial Management*”, Khanna Publishers, 1990.
6. S.N.Chary, “*Theory and Problems in Production & Operations Management*”, Tata McGraw Hill, 1995.

7. Upendra Kachru, “ *Production and Operations Management – Text and cases*” Excel books 1st edition 2007.
8. **Case Study1:** Monica Singhanian Gagan Gandhi , (2013)," Bharat Tobacco: vendor selection and vendor rating ", Emerald EmergingMarkets Case Studies, Vol. 3 Iss 2 pp. 1 – 8. Permanent link to this document:<http://dx.doi.org/10.1108/EEMCS-02-2013-0019>
9. **Case Study2:** Surajit Ghosh Dastidar Rahul Thakurta Anusha Sreeram , (2012),"Health Pharma: managing supply chain", Emerald Emerging MarketsCase Studies, Vol. 2 Iss 6 pp. 1 – 5. Permanent link to this document:<http://dx.doi.org/10.1108/20450621211275156>

NOTE: The list of cases, specific reference and books including recent articles will be announced in the class by concerned teachers from time to time.