

# Veer Narmad South Gujarat University

## Production Management II

S.Y. B.B.A., Semester IV

Effective from December 2012

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### Objectives:

To expose students with the basics of Operations Management.. They should understand basic management of manufacturing processes. They must appreciate that fundamentals of Operations Management are also applicable to production of services. They should also understand various aspects of production planning & control techniques. They should know various techniques of optimum utilization of resources like time, inventory , machine etc. They should also be exposed to quality assurance techniques.

### Pedagogic Tools:

Lectures, Case studies, Practical examples from corporate & business world, assignments & presentations. Industrial trips

### Chapter1. Work-study & Value Analysis: ( 40 % )

Sr. No	Sub Topic
1.	Introduction to Work-Study. Definition of work-study.
2.	Importance of Work-Study to productivity. Explanation with the help of learning curve.
3.	Two components of Work- Study: Method Study & Work Measurement (Time-Study)
4.	Definition of Method Study. The process of Method Study ( Steps of Method Study )
5.	Various Recording Techniques of Method-study. A. Various Flow Process Charts ( Man type, Material type, Man & Machine type, Two Handed flow process chart etc ) B. Various Flow Diagrams C. Photographic Techniques
6.	Practical problems of construction of flow process charts
7.	Definition of Work- Measurement. The process of Work Measurement (Time Study)
8.	Equipments & instruments of Time –Study .
9.	Numerical problems of Work- Measurement ( Time –Study )
10.	Techniques of In-direct time study
11.	Concept & definition of Value Analysis. Importance of Value Analysis.
12.	Objectives of Value Analysis
13.	Process of Value Analysis
14.	Techniques of Value Analysis

### CHAPTER 2. Over-view of Operations Planning ( Production Planning ) & Operations Scheduling (40 % )

Sr. No	Sub Topic
1.	Definition of Operations (Production) Planning. General idea and explanation of Production Planning
2.	Three levels of Production Planning: Strategic Planning, Tactical Planning & Operational Planning

3. Idea of Master Scheduling
4. Idea of Material Requirement Planning. The process of MRP with flow diagram. Inputs & outputs of MRP system. Bill of Material as heart of MRP process. Types of Bills of Material.. Numerical examples on MRP & Bill of Material.
5. Idea of Capacity Requirement Planning. The process of CRP with flow diagram. Methods of capacity adjustments
6. Definition of Production Scheduling & general idea
7. Scheduling Strategies. Idea of Forward & Backward Scheduling
8. Various types of Gantt Charts
9. Various mathematical techniques of scheduling : Johnson's Rule & assignment Techniques. Numerical problems on Johnson's rule & Assignment techniques
10. Other priority rules ( FCFS, LS, RS, LPT, SPT, EDD, PCO, Critical ratio rule ) & numerical problems for these models
11. Definition of Operations Control; Priority Control & Dispatching
12. Status Control & Follow-up

### Chapter 3. Quality & Cost Control: ( 20 % )

Sr. No	Sub Topic
1.	Definition of Quality & Quality Control
2.	Objectives of Quality Control
3.	Methods of Quality Control
4.	Acceptance Sampling for in-coming & out-going material quality
5.	Types of various costs of manufacturing, cost components, cost types, cost control techniques, Cost Standards for labour, material & overhead costs
6..	Concept of Budget with emphasis on Production Budget or Manufacturing Budget. Fixed & flexible budget

### **Note:**

From Chapter 1 & from Chapter 2 only, numerical problems should be asked in final exam.

### Reference Books:

1. Operations Management- By Joseph Monks , McGraw Hill
2. Operations management – By Everett Adams, PHI
3. Operations Management – By Martinich, PHI
4. Operations Management – By Krajewski, PHI
5. Operations Management – By William Stevenson , McGraw Hill
6. Operations Management – By Russell & Taylor