**BMS Semester: III** 

Paper No: 4

Paper: Fundamentals of Production & Operations Management;

Course Code: 3004

Marks: 100 (Internal 25 + External 75)

Credits: 4

Semester End Examination: 75 Marks Continuous Internal Evaluation: 25 Marks

**Duration of the Exam: 3 hours** 

## **Objectives:**

To students will be able to understand the concept of Production and Operations management and the various techniques required for streamlining the production process.

## **Internal Evaluation Criteria:**

All modes of internal evaluation should be conveyed to the students in the beginning of thesemester.

Criteria	Mode of Evaluation	Marks
Case Study	Case Solution	10
Unit test, viva-voce, assignments, internal objective test, visit to the industries to have practical exposure.	Review Report / presentation	15
	Total	25

Module	Unit No.	Detailed Syllabus	Teaching Hours	Marks/ Weightage
I	1	Introduction to Operations Management  a) Operations Management- Introduction, concept&scope  b) Characteristics of Modern Operations function  c) Importance of Operations Management  d) Systems Approach	15	25
		a) Introduction& concept b) Steps in locating a plant c) Factors influencing selection of a plant d) Methods used for locating of a plant (Factor Rating, Point Rating, Break Even Analysis, Quantitative Factor Analysis)		
II	2	Plant (Facility) Layout  a) Introduction b) Objectives of an Ideal Plant Layout c) Factors affecting the Plant Layout decisions d) Types of plant Layout  Just in Time a) Introduction b) Techniques c) Advantages & Disadvantages	15	25
III	3	Production Planning (Loading & Scheduling)  a) Meaning of Production Planning b) Production Planning Procedure c) Factors determining Production Control Procedure, Gantt Charts, Sequencing Numericals (nx2, nx3, nxm M/c Numericals) d) Routing & Scheduling, Despatching& Processing e) Production Control	15	25

IV	4	Maintenance of Plant	15	25
		a) Introduction b) Causes of Plant Breakdown c) Cost associated with Breakdown d) Preventive & Corrective Maintenance e) Types of Maintenances f) Elements of a Good Maintenance System  Ethical Practices related to Production &		
		Operations Management	60	100
		Total	60	100

## **Reference Books:**

- 1. Dr. Sanjay Sharma, Introduction to Management, Cyber Tech Publication, 2003
- 2. L.C. Jhamb, Production Management-Everest Publishing House, 12th edition 2007.
- S. A Chunawalla& D. R. Patel, Production & Operation Management- Himalaya Publishing House, 6<sup>th</sup> revised edition, 2013
- K. Aswathappa& K. ShridharaBhat, Production & Operation Management –Himalaya Publishing House, 2007