# GUJARAT UNIVERSITY SYLLABUS FOR T.Y.B.B.A. SEMESTER VI

**COURSE CODE-311 PRODUCTION & OPERATION MANAGEMENT**

## Introduction :

Production management plays an important role in the improvement in productivity and helps in creating a competitive advantage. It is essential to pass an understanding of how various operations work and contributes to create a special place in the market. The study would enable the students, manufacturers and service providers to compete globally.

## Objective:

The aim is to cover the most important issues concerning production managers and also giving them an understanding of basic tools and techniques of production. The budding managers should be given an insight of production with other managerial inputs

## Total Hours: 40 Number of credits: 3 Number of lectures: 3

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| **UNIT** | **WEIGHTAGE** |
| UNIT I | 25% |
| UNIT II | 25% |
| UNIT III | 25% |
| UNIT IV | 25% |
| TOTAL | 100% |

**Unit -1**

Meaning of production management and operation management Objectives of production management

Scope of production management Types of production

* 1. Continuous
  2. Intermittent
  3. Project
  4. Job shops

Concept of production planning and control

Function of production planning and control :Estimating, routing, scheduling, loading Dispatching, expediting, follow up, Inspection and corrective action

Concept of work study and motion study, Work measurement, basic work study procedure

## Unit II

Concept of purchasing , principles of purchasing and process of purchasing. Types of purchasing

* Blanket orders
* Stockless purchasing
* System contracting
* Small order purchases

Concept of material handling and principles of material handling . Concept of MRP-1 and MRP-2

Objectives ,advantages and disadvantages of MRP-1 concept of ERP and features of ERP

## Unit -III

1. concept of layout, factors affecting layout and features of a good layout. Types of layout
   * product
   * process
   * project
2. Concept of quality management, Cost of quality Deming’s 14 principles of quality

Concept of Six Sigma and its process Deming’s concept of PDCA cycle Concept of ISO-9000,14000,22000

## Unit –IV

Contemporary Issues

JIT :- Concept and characteristics (including the concept of KANBAN)

Kaizen:- Concept,3 guiding principles, activities falling under the kaizan umbrella Japanese 5-“S” approach (5 s kaizen movement)

Business process reengineering - Characteristics, steps Lean production and basic elements

## Assignment

1. Types of production system in any industry
2. A detailed perspective on operations management
3. Practical aspects of JIT, Kaizen, Six sigma, lean production
4. Hybrid MRP- JIT production system
5. Supply chain management in practice: the Keirtsu

## Seminar:

1. Green production
2. Challenges in maintaining a supply chain in Indian scenario
3. Operation in service industry
4. Work measurement and production standard
5. Capacity planning
6. Functional analysis

## Reference Books:

1. Production & Operation management by K.aswathappa & K.Shridhara bhatt, Himalaya publishing house.
2. Operation management by Roberta S. Russell & Bernard S. Taylor, Pearson higher education.
3. Production & Operation management by Kanishka Bedi, Oxford higher education.
4. Operation management by heizer render, pearson publication.