

**JYOTI NIVAS COLLEGE AUTONOMOUS
SYLLABUS FOR 2018 BATCH AND THEREAFTER**

Programme: B.Com LSM

Semester: IV

OPERATIONS MANAGEMENT

Course Code: 18BL403

No. of Hours: 60

COURSE OBJECTIVES:

- To familiarize the students with the operations in the logistics sector.
- To bring about awareness among students with changes and innovations in the operations of logistics.

LEARNING OUTCOMES:

- Identify the elements of operations management and various transformation processes to enhance productivity and competitiveness.
- Analyze and evaluate various facility alternatives and their capacity decisions, develop a balanced line of production & scheduling and sequencing techniques in operation environments
- Plan and implement suitable materials handling principles and practices in the operations.
- Plan and implement suitable quality control measures in Quality Circles to TQM.

UNIT 1:

6 HRS

Introduction: An overview of Operations Management

Operations Management: Introduction and overview, Operations Management Strategy framework, Understanding similarities and difference among products, goods and services- Historical evolution of operations management-Changes & Challenges

UNIT 2:

7HRS

Product development: Operations strategy

Product Strategy and integrated product development-Process Strategy-Capacity Planning Decisions-Facilities Location Strategies

UNIT 3:

12HRS

System Design

Facilities Layout and Material Handling Strategy-Group Technology, Flexible manufacturing system-Assembly line balancing-Project Management-CPM PERT(concept & problems)-Line of Balance (LOB)

UNIT 4:

13 HRS

Productivity & Quality tools

Productivity Concepts :Quality Circle, Kaizen and other SGA-Value analysis and Value Engineering-Total Quality management-Statistical Quality Control-Maintenance Planning and Control (Reliability, availability, maintainability)-Work Study-Method study &Work Measurement

Learning Curves-Work Sampling-Service Operations Management-Lean systems

UNIT 5:

22 HRS

Planning and managing operations

Demand Forecasting, Value chain and Supply chain Management-Purchasing, vendor selection and material management-Inventory Management & Just-in-Time Systems-Materials Requirement Planning ,MRP II and ERP-Aggregate Operations Planning-Scheduling, sequencing and dispatching

Transportation & Assignment Models

Definition of the transportation model. Balanced / Unbalanced, Minimization / Maximization. Determination of the initial basic feasible solution using (i) North-West Corner Rule (ii) Least cost method & (iii) Vogel's approximation method for balanced & unbalanced transportation problems. Optimality Test & obtaining of optimal solution. (Considering per unit transportation cost)-Assignment Problem – Hungarian method-Statement of Transportation & Assignment Problems as L.P. Problems

Skill Development:

- Go to any 2 logistics company or freight management company and compare their operations.
- Find out about the lean management techniques used.

BOOKS FOR REFERENCE:

- 1.- S. Anil Kumar & Suresh, Operations Management, New Age International publishers
2. Chase & Jacob, Operations Management –Mcgraw Hill Publishers.
- 3.GanganDeepSharma&MandeepMehendu, Production and Operations Management, Bangalore University
4. Prem Kumar Gupta, Problems in Operation Research,S.Chand.
5. Rajashekar&Lalitha –Corporate Accounting – Pearson, New Delhi, 2011.
6. S. Anil kumar, V. Rajesh kumar and B. Mariyappa – Advanced Financial Accounting – Himalaya Publishing House.