JYOTI NIVAS COLLEGE AUTONOMOUS SYLLABUS FOR 2019 BATCH AND THEREAFTER

Programme: Integrated B.Com. M.Com Semester: IV

PRODUCTION AND OPERATIONS MANAGEMENT

Course Code: 19IC403 No. of Hours: 60

COURSE OBJECTIVES:

- To impart knowledge and understanding of the concepts related to production and its functioning.
- To familiarize the students with the techniques related to the improvement of manufacturing and service operations.
- To imbibe the importance of quality control in products.

LEARNING OUTCOMES:

- To explore the students to various layout followed in manufacturing industries.
- To get an understanding of different manufacturing methods.
- To help the students to understand the importance of effective decision making in the area of production.

UNIT 1:Nature and scope of Production and Operations Managemen 08 HRS

Nature of production; production as a system; production as an organization function; decision-making in production; importance of production function; scope of production and operations management; characteristics of modem production and operations function.JIT-Significance and concepts.

UNIT 2:Manufacturing methods

08 HRS

Factors influencing choice of manufacturing methods; classification of manufacturing methods - project production, jobbing production, batch production, mass and flow production, process production (meaning and characteristics of each method).

UNIT 3:Plant location and layout

12 HRS

Factors affecting location; plant layout principles; types of plant layout -process layout, product layout, combined layout, static product layout or project layout, cellular layout, job shop layout (meaning of each type); Different types of facilities; building, sanitation, lighting, air conditioning, safety etc.

UNIT 4: Materials Management

10HRS

Purchasing; selection of suppliers; inventory management; material handling principles and practices; inventory control; value analysis; value engineering and ergonomics(Concepts only)

UNIT 5 Work study -Method study and work measurement

08HRS

Importance of work study, Factors influencing productivity, Concept of Standard time, Method study, Time and motion study, relationship of time and motion study to work study; work measurement; techniques of work measurement.

UNIT 6:Production planning and control & Quality Control

08HRS

Objectives of production planning and control; principles of production planning and control (PPC); main functions of production planning and control department.

Quality Control

Statistical quality control-, Quality Management, Quality circle, Meaning of ISO and TQM (Concepts only).

UNIT 7: Maintenance and waste management

06HRS

Introduction, meaning, types of maintenance. Waste management- scrap and surplus disposal, salvage and recovery.

SKILL DEVELOPMENT

- Diagrammatically show the layout of a industrial/business/service unit visited by you.
- Visit any two manufacturing companies of your choice, collect the number of accidents happened in the last two years and categorize them.
- Make a list of materials consumed by any manufacturing unit along with its quality and prices for the last five months.
- Visit a factory and report about various material handling practices and machines used by them.
- Visit a manufacturing unit. Observe the process of manufacturing and identify various activities and sequences involved.

REFERENCES:

- S.N. Chary, Production and Operations Management, Tata McGraw-Hill Publishing Company Limited
- 2. Aswathappa K, Production and Operations Management, Himalaya Publishing House
- 3. S.A Chunawalla, D.R. Patel, Production and Operations Management, Himalaya Publishing House
- 4. Thomas E. Morton, Production and Operations Management
- 5. N.G Nair, Production and Operation Management, Tata McGraw-Hill Publishing Company Limited
- 6. Dr. L.N Agarwal and Dr. K.C Jain, Production Management
- 7. Everett E. Adam Jr., and Ronald J. Ebert, Production and Operation Management
- 8. K.K Ahuja, Production Management.