BBA4.6: Production and Operations Management

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hours	64 hours

Pedagogy: Classroom lectures, Industrial visit, Seminars and Assignment

Course Objectives: To understand students with key concepts, Practical knowledge of Production and Operations Management in organization.

Course Outcomes: On successful completion of the course, the Students will be able

1. Recognize the increasing significance of Production and Operations Management in today's unpredictable business climate.
2. Acquire comprehensive knowledge of plant location decisions and facility layout planning.
3. Identify and appreciate the specific challenges organizations face in managing inventory effectively.
4. Build a clear understanding of the concepts and processes involved in Production Planning and Control.
5. Enhance the ability to function efficiently and competitively in the modern business environment.

Module No 1: Introduction to Production and Operation Management	**14 hours**
Meaning and Definition, Objectives, Scope of Production and Operation Management. Production vs Operation Management. Types of Production System. Automation: Meaning and Definition, need, types. Application of Artificial Intelligence in production process.	
Module No. 2: Plant Location and layout	**14 hours**
Meaning and Definition – Factors affecting location. Location Models :1. Factor rating method 2. Weighted factor rating method 3. Load-distance method 4. Centre of gravity method 5. Break even analysis (Simple Problems on BEP only). Plant layout: Meaning and Definition, Types of plant layout.– Different types of facilities – Organization of physical facilities – Building, Sanitation, Lighting, Air Conditioning and Safety.	
Module No.3: Production Planning and Control	**12 hours**
Meaning and Definition-Characteristics, Objectives, Scope, Factors Affecting Production Planning and Control, Production Planning System, Planning and Control System, Role of Production Planning and Control in Manufacturing Industry. Problems on Balanced and Unbalanced Transportation (NorthWest Corner Cell Method only).	

Chairman
BOS in Management (UG)
Kuvempu University
Jnanasahyadri
Shankaraghatta-577 45
(Shimoga Dist. Karnataka)

Module No. 4: Inventory Management	14 hours
Inventory Management – Concepts, Classification: Objectives: Factors Affecting Inventory Control Policy. Types of Inventory analysis. Inventory costs: Simple problems on EOQ Model and Stock Level. Quality Management - Quality Concepts, Difference among Inspections, Quality Control, Quality Assurances. Total Quality Management: Control Charts: acceptance sampling.	
Module No 5 : Maintenance and Waste Management Introduction	**10 hours**
Meaning – Objectives – Types of maintenance, Breakdown, Spares planning and control, Preventive routine, Relative Advantages, Maintenance Scheduling, Equipment reliability and Modern Scientific Maintenance Methods - Waste Management– Scrap and surplus disposal, Salvage and recovery.	

Skill Development Activities:

1. Visit two nearby industries and document their plant layout structures.
2. Choose a product and compare two potential manufacturing locations using a point-rating method to determine the best site.
3. Gather information on ISO certification requirements from any two industries.
4. Prepare a brief report outlining the essential steps involved in managing city waste.
5. Collect and summarize details regarding purchase procedures and inventory control in an organization.

References:

1. Ashwathappa. K & Sridhar Bhatt: Production & Operations Management, HPH.
2. Gondhalekar&Salunkhe: Productivity Techniques, HPH.
3. SN Chary, Production & Operations Management, McGraw Hill.
4. U. Kachru, Production & Operations Management, Excel Books.
5. Alan Muhlemann, John Oaclank and Keith Lockyn, Production & Operations Management, PHI.
6. K KAhuja, Production Management, CBS Publishers.
7. S.A. Chunawalla& Patel: Production & Operations Management, HPH.
8. Everett E Adam Jr., and Ronald J Ebert, Production & Operations Management, Sage Publishing
9. Dr. L. N.Agarwal and Dr. K.C. Jain, Production Management
10. Thomas E. Morton, Production Operations Management, South Western College.

Note: Latest edition of books may be used.

Chairman
BOS in Management (UG)
Kuvempu University
Jnanasahyadri
Shankaraghatta-577 45