

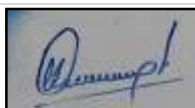
BBA III Year	BBA-I505		Semester-V		
	Production and Operation Management				
Time Allotted for End Semester Examination	Marks Allotted for Internal Assessment	Marks Allotted for End Term Examination(ESE)	Maximum Marks (MM)	Total Credits	Maximum Hours
3 Hrs.	30(20+10)	70	100	04	40

	Course Outcomes:	Mapped Program Outcomes
CO.1	Understanding of Production and Operations functions in different types of Orgnaizations.	PO1, PO2, PO7
CO.2	Introduction to different types of Layouts and factors that determine Capacity and location of a manufacturing plant	PO1, PO2, PO3
CO.3	Design of Production systems and Processes	PO6, PO8
CO.4	Preparing Material Requirement Pland and Drawing Inventory Models	PO3, PO4, PO7, PO8
CO.5	Learning Quality Concepts, Tools and Techniques to develop Products and Services with Zero defect	PO3, PO4, PO7, PO8

- Introduction to Production & Operations Management: Definition, need, responsibilities, key decisions of OM, goods vs. services. Operations as a key functional area in an organisation. Operation Strategies- Definition, relevance, strategy formulation process. Product and service design basics. Role of forecasting in operations management. **(10 Hours)**
- Capacity and facility planning: Capacity Planning: Definition, measures of capacity (input and output), types of planning over time horizon. Layout planning – Benefits of good layout, importance, different types of layouts (Process, Product, Group technology and Fixed position layout). Location Decisions and Models: Facility Location –Objective, factors that influence location decision, location evaluation methods- factor rating method. **(10 Hours)**
- Process Selection: Definition, Characteristics that influence the choice of alternative processes (volume and variety), type of processes- job shop, batch, mass and continuous, product-process design Matrix and Services design matrix, technology issues in process design, flexible manufacturing systems (FMS), and computer integrated manufacturing (CIM).Lean production system. **(10 Hours)**
- Inventory and Production Control: Concept of Inventory management, Inventory control system and techniques (ABC analysis, EOC, Quantity Discount, Reorder Point), MRP and ERP for resource planning, Aggregate planning: Definition, nature, strategies of aggregate planning, methods of aggregate planning (level plan, chase plan and mixed plan, keeping in mind demand, workforce and average inventory). Quality Management: Concept of quality, quality tools (process flowchart, cause and effect diagram, Check sheets, Histogram, Pareto analysis, scatter diagram, SPC), Concept of Six Sigma, Introduction to 9001:2015. **(10 Hours)**

SUGGESTED READINGS:

1. Adam,Ebert, & Ronald .J. (1992). *Production and Operation Management. Concepts, Models & Behaviour*. PHI, New Delhi
2. Aswathappa, K., &Bhat,Shridhara.K. (2011). *Production and Operations Management*.TMH, Delhi.



3. Chary, S.N.(2017). *Production and Operation Management*. TMH.NewDelhi .
4. Chase,R.B., Richard, Shankar, R., Jacobs, F.R.(2018).*Operations and Supply Management*. TMH, Delhi.
5. Garg, Ajay(2011).*Production and Operations Management*.TMH, Delhi.
6. Madan, Pankaj.(2010).*Production and Operation Management*. New Delhi.
7. Mahadevan, B.(2015). *Operations Management:Theory and Practices(3rd ed.)*. Pearson Education, Delhi.
8. Martinich, J.S.(1997). *Production and Operations Management*. John Wiley and Sons, New York.
9. Panneerselvam, R.(2012). *Production and Operations Management (3rd ed.)*. PHI, Delhi.
10. Russell, R. S., & Taylor, B. W. (2014). *Operations and Supply Chain Management (8th ed.)*. John Wiley and Sons.William. J. S. (2009).*Operation Management*. TMH, New Delhi

NOTE: The list of cases, specific references and books including recent articles will be announced in the class by concerned teachers from time to time.

