



COURSE MODULES OF THE SUBJECT TECHNOLOGY & OPERATION MANAGEMENT 20MBA302

Course Syllabus with CO's

Faculty Name: Bhavani B S				Academic Year: 2022 - 2023			
Department: MBA							
Course Code	Course Title	Core/ Elective	Prerequisite	Contact Hours			Total Hrs/ Sessions
				L	T	P	
20MBA302	Technology & Operation Management	Core	-	4	-	-	50
Objectives	Course Learning Objectives: - To acquaint the student with the basic management principles with respect to production and operations management. - To Familiar the student with different types of Production Systems. - To explain the students regarding various techniques used in Operations Management.						
Topics Covered as per Syllabus							
Module-1							
Introduction Operations Management: Meaning, Definition, Scope and Functions. Difference Between Production and Operations Management. Management Guru’s and their Contribution. The Roles and Functions of Operations Manager. Industry 4.0; Productions and Operations Management in Indian Context							
Module-2							
Process Mapping, Process Flow charts, Ishikawa Diagrams, Fishbone Diagram and Cause and Effect Relationship, 5M, 8P, and 4S Systems, Theory Z Approach.							
Module-3							
Concept of Lean Manufacturing; meaning of lean manufacturing; History of Lean Operations, Types of Waste, “5S” Technique of Eliminating the Waste, Lean Operations in the service sector, Role of Leadership, Lean Operations and Just In Time(JIT).							
Module-4							
Production System: Meaning, Types- Batch and Continuous Production, TPS: Introduction, Overview of Toyota Production Systems – Focused Areas, Techniques: 5S, JIT, JIDOKA, KANBAN, KAIZEN, POKAYOKE, Toyota Production Systems.							
Module-5							
Evolution of quality; Concept, Meaning and Features of TQM, Eight building blocks of TQM; TQM tools. Benchmarking: Concepts, Meaning, Benefits, Elements, Reasons for benchmarking, Process of benchmarking, FMEA; Quality Function Deployment (QFD) – House of Quality, QFD Process, Benefits, Taguchi Quality Loss Function, Quality Circles. Total Productive Maintenance (TPM) – Concept and need.							
Module-6							
ISO: ISO role; Functions of ISO, Quality System Family Series ISO 9000; ISO 14000; ISO21000. Six Sigma: Features of Six Sigma, Goals of Six Sigma, DMAIC, Six Sigma implementation. Supply Chain and Operations: Supply Chain “KEIRETSU”, Core Competency, Relationship of Operations and Supply Chain; Relationship of Purchasing and Supply Chain; Sources, Service Quality and Supply Chain.							
List of Text Books							



- 1 Production and Operations Management S. N. Chari. Mc Graw Hill. 6/e2.
- 2 Operations Management Theory and Practical B. Mahadevan Pearson. 3/e
- 3 Operations Management Jay Heizer Barry Render, Chuck Munson, Amit Sachan Pearson.12/e
- 4 Production and Operations Management R. Panneerselvam. PHI 3/e

List of URLs, Text Books, Notes, Multimedia Content, etc

- https://youtu.be/5S_Detail Explanation with ANIMATION.mp4
- [https://www.youtube.com/watch?tpm/VLC media file \(.mp4\) \(.mp4\)](https://www.youtube.com/watch?tpm/VLC media file (.mp4) (.mp4))
- [https://www.youtube.com/watch?jidoka/v=RLQivEQUgUc\(.mp4\)](https://www.youtube.com/watch?jidoka/v=RLQivEQUgUc(.mp4))

Note: The aforesaid links and study materials are suggestive in nature, they may be used with due regards to copy rights, patenting and other IPR rules.

Sl No	Description	Bloom's Level
CO1	Acquire the knowledge about the concepts of production and operation management	L1, L2
CO2	Demonstrate the basic concepts of process mapping	L1,L2,L3
CO3	Evaluate the importance of Lean Manufacturing	L1,L2,L3
CO4	Develop strategies of Total quality management	L1,L2,L3
CO5	Understand the roles of ISO standards and production system	L1,L2,L3

CO-PO MAPPING

CO	PO				
	PO1	PO2	PO3	PO4	PO5
CO1	X				
CO2	X			X	
CO3	X			X	
CO4	X		X	X	X
CO5	X		X		X

The SEE question paper will be set for 100 marks and the marks scored will be proportionately reduced to 60.

- The question paper will have 8 full questions carrying equal marks.
- Each full question is for 20 marks with 3 sub questions.
- Each full question will have sub question covering all the topics.
- The students will have to answer five full questions; selecting four full question from question number one to seven in the pattern of 3, 7 & 10 Marks and question number eight is compulsory.
- The SEE question paper should have the weightage of 60%