

S. No	Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
								Sessional	Final Exam	Total
4	BBAMJ - 604	Operations Management	Major	4	4	0	0	40	60	100

**COURSE OUTCOMES:**

At the end of the course the student will be able to: -	
CO1	Describe the fundamental concepts of Operations Management
CO2	Comprehend the role of services in Operations Management
CO3	Appreciate the factors critical to facility location and layout
CO4	Analyze various quality control measures
CO5	Assess the role of digital transformation in optimizing operational processes.

**Detailed Syllabus****Section A**

**Unit I: Introduction to production and operations management:** Concept and functions of production and operations management. Production and operations management systems. Product Design: elements of product design; Process Design: Concept and Types.

**(09 Hrs)**

**Unit II: Service Operations Management:** Characteristics and Classification of Services. Designing service processes, Service gap model, Service blueprint and service quality. Service capacity and Yield management.

**(10 Hrs)**

**Unit III: Plant Location and Layout: Plant Location:** Concept, Factors influencing plant location; Factor Rating Method, Break-Even Analysis and Centre of gravity method. **Plant Layout:** Concept, Objectives of a good layout, Types of layouts. Factors affecting plant layout.

**(09 Hrs)****Section B**

**Unit IV: Quality Management:** Quality, dimensions of quality. Fundamental Factors Affecting Quality (9 M's), Quality management: concept, process, Total Quality Management, Six Sigma, Quality Standards - ISO 9001:2015, ISO 9004:2018, Implementation of Quality System.

**(10 Hrs)**

**Unit V: Emerging Trends in Operations Management:** Global Supply Chain Management, Digital transformation in operations, Industry 4.0 technologies and their impact on operations, Evolution from traditional manufacturing to smart manufacturing, Challenges in adopting Industry 4.0 technologies in operations.

**(10 Hrs)****Textbooks:**

S. No.	Name of the Books	Author	Publisher	Edition (Pub. Yr.)
1	Production & Operations Management	Chary, S.N.	McGraw-Hill	6 <sup>th</sup> (2019)
2	Production and Operations Management	Kanishka Bedi	Oxford Higher Education	3 <sup>rd</sup> (2016)

**Reference Books:**

S. No.	Name of the Books	Author	Publisher	Edition (Pub. Yr.)
1.	Operations Management: Sustainability and Supply Chain Management	ay H. Heizer	Pearson	12 <sup>th</sup> (2016)