

<b>COURSE TITLE</b>	<b>OPERATIONS &amp; SUPPLY CHAIN MANAGEMENT</b>
<b>COURSE CODE</b>	<b>04MB0231</b>
<b>COURSE CREDITS</b>	<b>3</b>

**Course Outcomes:** After completion of this course, student will be able to:

- 1 Analyse the strategic role of operations and supply chains in modern businesses.
- 2 Evaluate procurement and sourcing strategies using supplier performance frameworks.
- 3 Analyze Design logistics and distribution strategies for responsive and cost-effective delivery.
- 4 Evaluate supply Assess and manage risks while integrating sustainability into supply chains.
- 5 Explore and interpret the impact of digital technologies on end-to-end supply chain performance.

**Pre-requisite of course:**NA

**Teaching and Examination Scheme**

<b>Theory Hours</b>	<b>Tutorial Hours</b>	<b>Practical Hours</b>	<b>ESE</b>	<b>IA</b>	<b>CSE</b>	<b>Viva</b>	<b>Term Work</b>
3	0	0	50	30	20	0	0

<b>Contents : Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
1	<b>Strategic Role of OSCM in the Digital Era:</b> Evolution and scope of operations and supply chain management; Operational efficiency and supply chain responsiveness; Global supply chains and competitive advantage; SCOR model and KPI frameworks; Digital transformation and data culture in OSCM.	9
2	<b>Procurement, Sourcing &amp; Vendor Management:</b> Strategic sourcing and supplier segmentation; Procurement life cycle and e-procurement platforms; Vendor selection and evaluation criteria; Supplier relationship management (SRM); Risk and compliance in sourcing.	9
3	<b>Logistics and Distribution Strategies:</b> Distribution network design and facility location principles; Role of 3PL, 4PL, and last-mile delivery models; Inbound vs. outbound logistics; Freight consolidation, routing, and vehicle scheduling; Use of GIS and routing software in logistics planning.	9
4	<b>Supply Chain Risk, Resilience &amp; Sustainability:</b> Identification and assessment of supply chain risks; Risk mitigation strategies and supply chain resilience; Sustainability in supply chains: circular economy, green logistics; Reverse logistics and end-of-life product management; Regulatory and ethical challenges.	9

Contents : Unit	Topics	Contact Hours
5	<b>Emerging Technologies in Supply Chain Management:</b> Role of ERP, WMS, and TMS in supply chain integration; Applications of blockchain, IoT, and RFID; AI/ML in demand sensing and fulfilment; Supply chain visibility and control towers; Industry 4.0, smart warehouses, and autonomous logistics.	9
<b>Total Hours</b>		<b>45</b>

#### Textbook :

- 1 Supply Chain Management: Strategy, Planning, and Operation, Chopra, S., & Meindl, P, Pearson, 2019
- 2 Operations and Supply Chain Management, Jacobs, F. R., & Chase, R. B., McGraw-Hill., 2023

#### References:

- 1 Operations and Supply Chain Management, Operations and Supply Chain Management, Roberta S. Russell, Bernard W. Taylor, Venkataramanah Saddikuti, Pavan Kumar Gudavalleti, Wiley, 2023
- 2 Production and Operations Management, Production and Operations Management, Kanishka Bedi, Oxford Press, 2013

#### Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

#### Distribution of Theory for course delivery and evaluation

Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
0.00	0.00	30.00	20.00	25.00	25.00