



**Dr. V. N. Bedekar Institute of Management, Thane**  
**Teaching Plan (MMS)**  
**Academic Year (2019-2020)**

Programme: MMS Semester: III Period: July'19 – October'19  
Course Code: MMS-  
Name of the subject: Supply Chain Management  
Maximum marks: 100 (60+40) No. of Sessions: 13/14 (3 hrs each)  
Name of the Faculty: Mahesh M Bhanushali  
Mobile No: 8237102541 Email: mbhanushali@vpmthane.org

<b>Program Outcomes (PO)</b>	<b>Course Outcomes (CO)</b>
<ol style="list-style-type: none"><li>1. Integrate and apply business knowledge and management techniques for problem-solving / analytical skills.</li><li>2. Demonstrate decision-making ability.</li><li>3. Ability to develop culture of technology-usage.</li></ol>	<ol style="list-style-type: none"><li>1. To explore the major elements and concepts of supply chain</li><li>2. Student should be able to measure and evaluate performance of supply chain</li><li>3. Student should be able to design supply chain networks and should be able to handle issues and challenges in supply chain</li><li>4. Design supply Channels for different products, Customers, Business</li></ol>

**Reference Books:**

1. David Simchi-Levi, Phillip Kaminsky, Designing and Managing Supply Chain, Tata McGraw-Hill publication, 2013
2. Sunil Chopra, Peter Meindl, D V Kalra, Supply Chain Management, Pearson publications, Fifth Edition
3. Martin Christopher: Logistics and Supply Chain Management, Tata McGraw-Hill, 2013
4. S N Chary: Theory & Problems in Production & Operations Management, Tata McGraw Hill, Edition 4
5. Kanishka Bedi: Production & Operations Management, Oxford University Press, 2012
6. B. Mahadevan, Operations Management, Pearson Publication, 2010

**A. Plan:**

<b><u>Session No.</u></b>	<b><u>Pl. Date</u></b>	<b><u>Topic</u></b>	<b><u>Ref. Study Material</u></b>	<b><u>Course Outcomes</u></b>
<b>1</b>		<b>Introduction to the supply chain</b> Importance of Forecasting and decision making based on forecast. What is a supply chain? Decision phases in a supply chain. Demand and capacity variations and strategies. Achieving strategic fit., Supply Chain and Demand chain,	Sunil Chopra, Peter Meindl, D V Kalra, Supply Chain Management, Pearson publications, Fifth Edition (Page 2-22)	Understand the basic concept of supply chain and learn decision making points of the same.

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			Example: Dell Corporation on obtaining Strategic Fit	
<b>2</b>		<p><b>Simulation on Measuring Bullwhip Effect, Concept of Bullwhip Effect Logistics</b></p> <p>Competitive advantage and three C, Competitive advantage through logistics. Logistics-A system concept, Customer value chain, Logistics functions. Logistics Mission, Objectives, Goals, Decisions. Reverse Logistics.</p>	<p>Online Source:</p> <p>www.washburn.edu/sobu/broch/bu347/bullwhip.xls</p> <p>Martin Christopher: Logistics and Supply Chain Management, Tata McGraw-Hill, 2013</p>	To Understand how to measure the effect of bullwhip phenomena and understanding the concept of logistics
<b>3</b>		<p><b>Warehousing and Distribution</b></p> <p>Case Study of Flipkart Warehouse, Inviting Flipkart Executive for Student Interaction.</p> <p>Role of warehouse in Logistics, Warehousing functions, Types of Warehouses Warehouse site selection, Layout design, Warehouse Decision model. Warehouse automation, strategies, performance, costing.</p> <p>Distribution, Role, Importance, Levels, Channels, Structure, Functions.</p> <p>Channel partners, functions, Tasks, Flows, Strategy.</p> <p>Free trade zones and special economic zones. Risk Pooling</p>	<p>David Simchi-Levi, Phillip Kaminsky, Designing and Managing Supply Chain, Tata McGraw-Hill publication, 2013 (page 215-249)</p> <p>Case study on Risk Pooling Reference: David Simchi-Levi, Phillip Kaminsky, Designing and Managing Supply Chain, Tata McGraw-Hill publication</p> <p>Page: 49-50</p> <p>News Article on Flipkart Warehouse</p>	To understand Factors affecting the decision making in facility locations



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			management, Economic Times 2016	
<b>4</b>		<b>Order Processing and Logistics Information system</b> Order Preparation, Transmittal, Order entry, Order filling, Order status reporting Industrial order processing and Retail order processing. Web based order processing. Processing priorities.	IOCL PO Material, GPC, TQ/CQ Material Source: Industry – IOCL Panipat, Reliance Airoli Real Documents Collected from Industry to provide the exposure to students.	Understand the Processes and Their importance
<b>5</b>		<b>Performance Measurement and Controls in Supply Chain Management</b> Pre- transaction, Transaction, Posttransaction elements, Service attributes Value added customer service, Importance of Logistics Customer service Sales and Service relationship, Cost and Service relationship. Objective, Levels, Parameters of performance measures- Cycle time, Fill Rate. Inventory Turnover, On-time Shipping and Delivery, Perfect Order, Stock out. Transportation measurements, Customer perception measure, Audit. Gap Analysis Concept of Benchmarking, Benchmarking for Best Practices SCOR and DCOR	Sunil Chopra, Peter Meindl, D V Kalra, Supply Chain Management, Pearson publications, Fifth Edition (Page 23-43)  Activity of Designing the criteria for Supply Chain Performance Measurement Source: Research Papers: Emerald Publishing House, Scopus Indexed	To understand the techniques and Methods for performance measurement
<b>6</b>		<b>Class Test and Transportation</b> Infrastructure, road, rail, air water, pipeline. Freight Management, Freight cost. Transportation Network Route	Sunil Chopra, Peter Meindl, D V Kalra, Supply Chain Management, Pearson	Understand the advantages and disadvantages of different means of Transportation and using optimum way to



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		planning, Containerization, Packing. Effective / Cost Optimizing Distribution strategies- Direct shipment, Cross-docking, Milk run, transshipment.	publications, Fifth Edition (Page 420-450)	transport
<b>7</b>		<b>Designing Logistics and distribution network in a supply chain</b> <b>Applications to Online Sales</b> <b>Network Design in the SC</b> the role of distribution in the supply chain. Importance of Smart Transportation Distribution Center Concept , Modern DC's , Robotics Usage for pick and pack Factors influencing distribution network design. <b>Supply Chain Integration</b> Design option for a distribution network. Distribution network in practice.	David Simchi-Levi, phillip Kaminsky, Designing and Managing Supply Chain, Tata McGraw-Hill publication, 2013 (page 354)  Beer Game and discussions	Understand concept of designing the logistics network
<b>8</b>		<b>The value of Information</b> Bullwhip effect. Effective forecasts. Information for the coordination of systems. Collaborative Planning Forecasting Replenishment (CPRF) concept. Locating desired products. Lead time reduction. Information and supply chain trade-off. Designing the supply chain for conflicting goals.	David Simchi-Levi, phillip Kaminsky, Designing and Managing Supply Chain, Tata McGraw-Hill publication, 2013 (page 419-451)	Understanding regarding which information is important and its analysis
<b>9</b>		<b>Strategic Alliances</b> A framework for strategic alliances. Third party / fourth party logistics. What are 3PL/4PL, Advantages and disadvantages of 3PL, 3PL issues and requirements? Retailer supplier partnership. Types of RSP, Requirements of RSP	David Simchi-Levi, phillip Kaminsky, Designing and Managing Supply Chain, Tata McGraw-Hill publication, 2013 (251-270)	Understand various strategic alliances like 3PL, 4PL and their roles



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		Inventory ownership in RSP, Issues and steps in RSP implementation Advantages and disadvantages of RSP. Distribution Integration Types of and issues in Distribution integration. <b>Customer Value</b>		
<b>10</b>		<b>E-procurement and outsourcing</b> Outsourcing benefits and risks. A framework for Buy/Make decisions E-procurement. A framework of E procurement. Impact of Internet on supply chain strategies (E-business).	Online IOCL/reliance E-Procurement Portal and Details on Tendering process. This Lecture will be held in Computer lab	To understand the framework of E-procurement
<b>11</b>		<b>Designing Global Supply Chain Networks</b> Global market / Technological/ Cost/ Political and Economic Forces. Risks and advantages of international supply chain. International versus Regional products. Local autonomy versus central control. Regional differences in Logistics- Cultural differences/ infrastructure/ performance expectation and evaluation Information systems availability, human resources. Global business logistics.	Sunil Chopra, Peter Meindl, D V Kalra, Supply Chain Management, Pearson publications, Fifth Edition (Page 159)	Understand the global supply chain networks
<b>12</b>		<b>Class test and Performance Measurement and Controls in Supply Chain Management</b> Measurement of a Robust Supply Chain. Cost / Quality / Service Measurement Introduction and concept of Benchmarking. Gap Analysis. Key actions in benchmarking for best practices. Overview of Supply Chain Operations Reference (SCOR) Modeling. Balance scorecard for SCM.	Sunil Chopra, Peter Meindl, D V Kalra, Supply Chain Management, Pearson publications, Fifth Edition (Page 23-43)  Activity of	To understand the techniques and Methods for performance measurement



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		<b>Lean Manufacturing and Mass Customisation</b>	Designing the criteria for Supply Chain Performance Measurement Source: Industry Material from M/S Sundyne Corporation Criteria Channel one document	
<b>13</b>		<b>Ethical issues in SCM</b> Supply chain vulnerability. Conformance to applicable laws such as Contract and commercial laws, Trade regulation, government procurement regulations, patents Copyrights, trademark laws, transportation and logistics laws and regulations Environmental laws. International practices. Confidentiality and proprietary information.	Sunil Chopra, Peter Meindl, D V Kalra, Supply Chain Management, Pearson publications, Fifth Edition	Understand Ethical issues in supply chain
<b>14</b>		<b>Current Trends in Supply Chain</b>	SCM Pro Organization manuals/Magazines	To make aware about current trends in supply chain



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**B. Practical Approach: Other activities**

Sr. No.	Activity Name	Topic Covered	Learning outcomes	Source
1	Learnbiz Simulation on Beer Game	Bullwhip Effect	To learn decision making on how much quantity to order as per the inventory level	Learnbiz Simulation
2	Role Play/activity- Beer Game	Bullwhip Effect	To make learner realise the bullwhip effect and importance of managing the inventory	Book: David Simchi-Levi
3	Case Study	Risk Pooling	Decision Making in Inventory and Warehouse Management	Book: David Simchi-Levi
4	Simulation-Excel	Measuring Bullwhip effect	How to Measure the bullwhip effect	<a href="http://www.washburn.edu/sobu/broach/bu347/bullwhip.xls">www.washburn.edu/sobu/broach/bu347/bullwhip.xls</a>
5	Business Quiz / Business News sharing	Economics Times Article on supply chain and logistics Quiz on MRP	To understand the decision making in supply chain and basic principles of MRP	<a href="http://highered.mheducation.com/sites/0072983906/student_view0/chapter16/multiple_choice_quiz.html">http://highered.mheducation.com/sites/0072983906/student_view0/chapter16/multiple_choice_quiz.html</a>
6	Use of Softwares and Labs	Inventory Management	To understand the inventory planning systematically	Inventoria software

**C. Innovative pedagogy adopted:**

1. Use of Simulation Software in terms of Games
2. Use of Microsoft Excel and Data Analysis Tab
3. Various activities such as 5ps through playing cards

**Prepared by:**  
**Faculty**

**Reviewed by:**  
**Specialisation**

**Approved by:**  
**ADC**

**Date:**

**Date:**

**Date:**



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**A. Execution:**

<u>Session No.</u>	<u>Actual Date</u>	<u>Topic Covered</u>	<u>Attendance %</u>	<u>Evaluation Method</u>	<u>Case Study Ref.</u>	<u>Quiz Ref.</u>	<u>CR Sign</u>
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

**B. Evaluation:**

<b>Component</b>	<b>Details</b>	<b>Marks</b>
Presentations & Viva	Mandatory	5+5
Class Test (3 for MMS )	Mandatory (MCQ, Descriptive, Etc)	20
Assignments / Others	Mandatory	5
Participation/Attendance	Mandatory	5
Final Exam	Mandatory	60

**C. Student Performance Analysis:**

<u>Avg. Attendance</u>	<u>Avg. Internal Marks</u>	<u>% Failed in Internals</u>	<u>Avg. Final Marks</u>	<u>% Failed in Final</u>	<u>No. of best students &gt; 80%</u>	<u>No. of students needs improvement</u>

**D. Attainment:**

	<b>CO1</b>	<b>CO2</b>	<b>CO3</b>		
<b>PO1</b>					
<b>PO2</b>					





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<b>PO3</b>					

**Comments / Suggestions / Recommendations:**

**Suggestions (if any) to students on subject related Certificate/Diploma or Add-on program: -**

**Signature of Faculty**

**Signature of the Co-ordinator / ADC**