

| <b>SUPPLY CHAIN MANAGEMENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |
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| <b>Course Code: 20MEDE753</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Total Contact Hours: 45</b> |
| <b>Credits:3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Hours per week:3</b>        |
| <b>LTP: 3-0-0</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |
| <b>Prerequisite:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                |
| <b>COURSE LEARNING OBJECTIVES:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                |
| <p>The aim of this course is to create an</p> <ol style="list-style-type: none"> <li>An understanding of the primary differences between logistics and supply chain management</li> <li>An understanding of the management components of supply chain management</li> <li>An understanding of the individual processes of supply chain management</li> </ol>                                                                                                                                                                                                                                    |                                |
| <b>UNIT – I</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>9 hours</b>                 |
| <b>INTRODUCTION:</b><br>Fundamentals -need for supply chain management —evolution- Role in Economy - Importance - customer value, customer service & retention – value of out of stock- setting customer service priorities- Logistics and shareholder value, logistics cost analysis- Principles of logistics costing,                                                                                                                                                                                                                                                                         |                                |
| <b>UNIT – II</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>9 hours</b>                 |
| Planning the Supply Chain: Logistics strategy- strategy options, designing a logistics strategy, Implementation - Relating Strategy to Lower Decisions - Areas for Decisions in Implementation - Managing Change                                                                                                                                                                                                                                                                                                                                                                                |                                |
| <b>UNIT – III</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>9 hours</b>                 |
| Planning Resources and Controlling Material Flow: Types of Planning Capacity Planning - Adjusting Capacity - Tactical Planning - Short-term Schedules- Material Requirements Planning -Extending the Role of MRP -Principles of Just-in-time -Achieving Just-in-time Operations - Extending JIT Along the Supply Chain                                                                                                                                                                                                                                                                          |                                |
| <b>UNIT – IV</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>9 hours</b>                 |
| Synchronous supply chain- extended enterprise and the virtual supply chain- role of information- ‘Quick response’ logistics- Production strategies for quick response- Logistics systems dynamics Sustainable supply chain - The triple bottom line- Greenhouse gases and the supply chain- Reducing the transport-intensity of supply chains – Carbon footprint and supply chain-Reduce, reuse, recycle                                                                                                                                                                                        |                                |
| <b>UNIT – V</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>9 hours</b>                 |
| <b>Managing risk in supply chain:</b> Understanding the supply chain risk profile- organizing for global logistics – thinking global acting local – The future of global supply chain<br><b>Supply chain of the future:</b> emerging megatrends-shifting centres of economic activity, The multi-channel revolution seeking structural flexibility                                                                                                                                                                                                                                              |                                |
| <b>COURSE OUTCOMES:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |
| <p>On completion of the course the student will be able to: -</p> <p><b>CO1:</b> Discuss fundamental supply chain management and logistics concepts.</p> <p><b>CO2:</b> Explain the logistics strategies required for the supply chain</p> <p><b>CO3:</b> Elucidate on planning for resources and material flow</p> <p><b>CO4:</b> Implement synchronous and sustainable supply chain</p> <p><b>CO5:</b> Discuss the risks and future of supply chain management</p> <p><b>CO6:</b> Formulate system requirements for the management of a supply chain with corporate goals and strategies.</p> |                                |
| <b>TEXT BOOK:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |

### REFERENCE BOOK:

**Continuous Internal Evaluation [CIE] (maximum 30 marks)**

- Semester End Examination [SEE] (maximum 70 marks)**

- ### CO – PO Mapping

[illegible]