SUPPLY CHAIN MANAGEMENT									
Course Code: 20MEDE753	<b>Total Contact Hours: 45</b>								
Credits:3	Hours per week:3								
LTP: 3-0-0									
Prerequisite:									
COURSE LEARNING OBJECTIVES:									
The aim of this course is to create an									
i. An understanding of the primary diffe	erences between logistics and supply chain								
management									
ii. An understanding of the management	components of supply chain management								
iii. An understanding of the individual pr	ocesses of supply chain management								
UNIT – I	9 hours								
INTRODUCTION:									
Fundamentals -need for supply chain manageme	nt —evolution- Role in Economy - Importance -								
customer value, customer service & retention -	value of out of stock- setting customer service								
priorities- Logistics and shareholder value, logist	tics cost analysis- Principles of logistics costing,								
UNIT – II	9 hours								
Planning the Supply Chain: Logistics strategy-	strategy options, designing a logistics strategy,								
	ecisions - Areas for Decisions in Implementation								
- Managing Change									
	9 hours								

UNIT – III 9 hours

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

UNIT – IV 9 hours

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

UNIT – V 9 hours

**Managing risk in supply chain:** Understanding the supply chain risk profile- organizing for global logistics – thinking global acting local – The future of global supply chain

Supply chain of the future: emerging megatrends-shifting centres of economic activity, The multi-channel revolution seeking structural flexibility

#### **COURSE OUTCOMES:**

On completion of the course the student will be able to: -

CO1: Discuss fundamental supply chain management and logistics concepts.

CO2: Explain the logistics strategies required for the supply chain

CO3: Elucidate on planning for resources and material flow

CO4: Implement synchronous and sustainable supply chain

CO5: Discuss the risks and future of supply chain management

**CO6**: Formulate system requirements for the management of a supply chain with corporate goals and strategies.

#### **TEXT BOOK:**

T1	Logistics An Introduction to Supply Chain Management, Donald Waters,									
	PALGRAVE MACMILLAN, 2003 edition									
T2	Logistics & Supply Chain management, Martin Christopher, Financial times									
	Prentice Hall, Pearson 2011 fourth edition									
REFERENCE BOOK:										
R1	Janat Shah, Supply Chain Management – Text and Cases, Pearson Education, 5 th									
	edition, 2012.									
R2	Sunil Chopra and Peter Meindl, Supply Chain Management-Strategy Planning and									
	Operation, PHI Learning / Pearson Education, 5 th edition, 2012.									
	Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson									
	Education, 5 th edition, 2013.									
Web Links (if any): http://nptel.ac.in										

## **Scheme of Evaluation (100 marks)**

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

- Will be evaluated for 30 marks out of which 20marks for IA, 05marks for MCQs and 05marks for attendance.
- IA Question paper pattern (30marks)
- 6 questions with internal choice (1or 2, 3 or 4, 5 or 6) each question carries 15 marks.

# Semester End Examination [SEE] (maximum 70 marks)

- Question paper consists of 8 questions
- Each question shall carry 14 marks with two to three subdivisions.
- The students are required to answer five questions

CO – PO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	-	-	-	-	-	-	-	-	-	-	-	1	-
CO2	3	-	-	-	-	2	-	-	-	-	-	-	1	-
CO3	3	-	-	-	-	2	-	-	-	-	-	-	1	-
CO4	3	-	2	1	-	2	-	-	-	-	-	-	1	-
CO5	3	-	-	-	-	-	-	-	-	-	-	-	1	-
CO6	2	-	-	-	-	-	-	-	-	-	-	-	1	-