

## **BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI (RAJ)**

In addition to part I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course

### **COURSE HANDOUT (II SEMESTER 2020 – 2021)**

**COURSE NO.** : MBA G558  
**COURSE TITLE** : OPERATIONS AND SUPPLY CHAIN MANAGEMENT  
**Instructor In-charge** : DR. SATYENDRA KR. SHARMA

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#### **Scope and Objective**

The course provides students with the opportunity to get clarity and insight into the phenomenon of Operations and Supply Chains and their management. It will assist them in understanding of operations across the supply chain. SCM is not as a technology issue but rather a business strategy for companies trying to create new competitive advantage.

- i. Attain familiarity with the fundamentals of Operations and Supply Chain Management and its use in organizations seeking to create differentiation.
- ii. Understand issues in implementing Supply Chain Management and e-fulfilment in a web enabled world.

#### **Pedagogy**

The course will be taught in the way of lectures, case discussions, class exercises.

#### **Text Book**

Text Book (T!): Roberta S. Russel and Bernard W. Taylor III, Operations and Supply Chain Management, Eight Edition, Wiley Publisher

T2 Sunil Chopra, Peter Meindl and D V Kalra, “Supply Chain Management: Strategy, planning and Operation”, Pearson Education, Fifth Edition, India, 2012

#### **Reference Books**

**R2: David Simchi-Levi and others, "Designing and managing the supply chain "**Third Edition, Tata McGraw-Hill, 2010

R3 Janat shah “**Supply chain** Management Text and Cases “ Pearson Education Second edition 2009

R4 Heizer and Render Operations Management, 12<sup>th</sup> Edition, Pearson

#### **Website:**

Council of supply chain management professionals website “[www.cscmp.org](http://www.cscmp.org)”

## Plan of Contact Sessions

Lecture No.	Learning Objectives	Topics to be covered	TB Chapter No.
1-.2	Operations and Supply Chain Strategy	Operations Function, Evolution of Operations, Productivity and Competitiveness, Strategy and Operations	T1 Chapter 1
3-4	Ensuring Quality	Quality definitions, QMS, Quality tools, TQM, Quality in Services, The cost of Quality	T1 Chapter 2
5-6	Process Capability and Statistical Process Control	Basis of SPC, Control charts for attributes, Control charts for variables, Control chart patterns , Process Capability	T1 Chapter 3
7-8	Product Design	The design process, Rapid prototyping and Concurrent design, Design quality reviews, Design for environment, Quality function deployment	T1 Chapter 4
9-10	Designing Services	The service economy, Characteristics of services, Service design process, Tools for service design	T1 Chapter 5
11-12	Process Design	Process Planning, Process Analysis, Process Innovation	T1 Chapter 6
13-14	Planning Facilities and Capacity	Facility layouts, Capacity Planning, Process layouts, Product layouts, Hybrid layouts	T1 Chapter 7
15 -16	What is Supply Chain Management & how does it create Value?	Describe the cycle and push/ pull view of a supply chain Identify the key supply chain decision phases. Goal of supply chain & impact of supply chain decision on the success of a firm	T2 Chapter 1
17-18	Strategic Fit & Scope	Achieving strategic fit is critical to a company's overall success.	T2 Chapter 2
19-20	Supply Chain Drivers and Obstacles	Identify the major drivers of supply chain performance. Discuss the role each driver plays. Describe the major obstacles that must be overcome to manage a supply chain successfully.	T2. Chapter 3
		Article Discussion	
21-22	Designing the	Designing the distribution network in a	T2. Chapter

	distribution network	supply chain, Network design in the supply chain, Network design in uncertain environment	4
23-26	Planning demand and supply in supply chain	Demand forecasting in supply chain, Aggregate planning in the supply chain, Planning supply and demand in the supply chain: Managing predictable variability	T2. chapter 7, 8, 9
27-30	Planning and managing inventories in a supply chain	Managing economies of scale in the supply chain: Cycle inventory, Managing uncertainty in the supply chain: Safety inventory, Determining optimal level of product availability	T. chapter 10, 11 & 12
31-33	Coordination and Technology in the Supply Chain	Coordination in the supply chain, Information technology and the supply chain, E-business and supply chain	T. chapter 10 & 16
34-38	Project Presentations		

### Evaluation Scheme

EC No	Component	Duration	Weightage	Date	Nature
1.	Mid- Semester Exam	90 Min.	25%		Closed book
2.	Comprehensive Exam	3 hrs	40%		50 %Closed book and 50% Open Book
3.	Class Participation in case discussions		20%		Open book
4.	Project Assignments	20 Min each Presentation	15%		Open book

**Team Formation:** Students have to give presentation in a team. Each team will be assigned a topic and a presentation of 20 minutes will be taken. Teams will be formed in class.

Chamber Consultation hour: Tuesday, 5 to 6 PM.

**Notices:** All notices concerning this course will be displayed on the Management Group Notice Board only.

**Instructor In-charge**

