

## DEPARTMENT OF INTERNATIONAL BUSINESS SCHOOL OF MANAGEMENT

# MBA (Logistics & Supply Chain Management)

## **COURSE CURRICULUM**



## PONDICHERRY UNIVERSITY PONDICHERRY 605 014

**2020-21 ONWARDS** 

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#### The University

The Pondicherry University (A Central University) was established by an Act of Parliament, which was enforced by a Notification of the Government of India in October 1985. The campus is spread over 800 acres of land which is rolling down to the Bay of Bengal sea beach. The inner landscape is featured by sprawling lawns, well nurtured gardens, picturesque road shapes, and lush green belt with eco-forest mostly flavored by Cashew-nuts. The tranquil setting makes Pondicherry University Campus a unique one with exquisite natural beauty with sea shore that captures viewers' imagination and provides an ideal atmosphere for persuading study and research. On the University Campus, 15 Schools and 37 Departments with ample number of students across the globe who undertake post-graduation program under Choice Based Credit System (CBCS). The University is a member of the Association of Commonwealth Universities and signed MoU with several foreign Universities/Institutions.

#### **School of Management**

The School of Management is the first School to be established in the University in the year 1986 and is one of the popular Schools of Excellence in the campus primarily focusing on the business-related courses since the very inception of this University. The School is offering five MBA programs – MBA (International Business), MBA (General), MBA (Tourism Studies), MBA (Banking Technology), and MBA (Insurance Management, Karaikal Campus).

#### **Department of International Business (DIB)**

In response to the changes that are taking place on the face of the world business scenario and the needs of the industry at national and international level, on the recommendations of duly constituted advisory committee, Pondicherry University established the Department of International Business during the academic year 2006 - 2007 to offer a specialized MBA program in International Business under the roof of the School of Management. The MBA program is to prepare leader-managers with competencies in international business operations.

**Vision**: Vision of the Department is to shape management education with Logistics and Supply Chain Management. orientation by generating new leading-edge knowledge and preparing upright, dependable, socially sensitive leader-managers highly committed to the progress of mankind. **Mission:** To support business organizations in India and other developing countries by enriching the best practices in Logistics and Supply Chain Management. It shall seek to do this by preparing risk-taking leader-managers who will pioneer emerging global business operations and set new benchmarks.

### Objectives

- I. To Provide a congenial learning and training environment to potential aspirants for gaining deep insight and for pursuing careers in Logistics and Supply Chain Management.
- II. To Enhance knowledge through innovative teaching and research, conceptual and applied, relevant to Logistics and Supply Chain Management, and to disseminate such knowledge through budding leader-managers and research publications on contemporary issues in Logistics and Supply Chain Management.
- III. To Gain Command on the key factors in new business models based on ecommerce and an insight into how they affect traditional systems of Logistics Management
- IV. To Analyze and organize Global Network Logistics for trade and transport systems, sourcing and procurement and Supply chain management. (Electives-International LSCM)
- V. To Address LSCM Problems in a Holistic approach by considering general management concepts, human resources, environmental concerns and quality, technological and economic aspects. (Electives- HRM for efficient LSCM)
- VI. To elaborate solid arguments to convince and motivate decision makers, select the proper LSCM partners and then plan and coordinate the project to implement the solution
- VII. To Apply the latest developments in information technology to Logistics and supply chain management in order to generate greater added value. (Electives-IT for LSCM)

#### **About MBA Logistics and Supply Chain Management Program**

Rapid developments in the international business on one hand and the consequential impact of the same on India's domestic market on the other, call for a professional approach and sensitivity to international business environment. The MBA: Logistics and Supply Chain Management is a specialized program for developing a competent cadre of business executives to meet the country's growing requirements of training personnel in the field of Logistics and Supply chain management. The main academic focus is on equipping the participants with an in-depth knowledge of global business and to instill in them an urge to take up competitive global challenges. The program also focuses on equipping its students with all the knowledge and expertise in dealing with the corporate world ranging from International Marketing, International Finance, Economic Analysis, International Logistics and supply chain management.

#### **Program Features**

The MBA: Logistic and Supply Chain Management Program – a multidisciplinary and integrative curriculum reinforcing the strategic, international and ethical dimensions of business – has the following salient features:

- With experienced teachers on the Faculty, the program equips the students with the practical nuances of conducting Logistic and Supply Chain Management in a competitive environment;
- The Course is meticulously designed to meet the growing Logistic and Supply Chain Management challenges, and to develop a competent cadre of business executives.
- The University has a well-equipped library along with the school library, with online databases and Computer Centers with a 24 -hour Internet access.
- Using lectures, case studies, problem-based learning and group projects, the program prepares students to manage, motivate and innovate.
- Periodical Guest Lectures by Executives from different MNCs; Industry Visits; Port Visits, Summer and a Final Project in MNCs are the USPs of the program.

#### **PONDICHERRY UNIVERSITY**

Department of International Business School of Management

#### Programme Outcome for MBA Logistics & Supply Chain Management (PO's)

- 1. The MBA program in Logistics and Supply Chain Management (LSCM) has the main goal of educating professionals able to take decisions in logistics and supply chain management considering its operational, tactical and strategic aspects from an Integrated perspective by covering subjects from technology, engineering and business.
- 2. Ability to address LSCM problems in a holistic approach by taking into account general management concepts, human resources, environmental concerns, and quality, technological and economic aspects
- 3. Ability to analyze, structure and discuss situations to identify problems in the field of LSCM and evaluate their complexity
- 4. Ability to select and apply suitable methodologies and strategies to design a solution for an LSCM problem
- 5. Ability to evaluate different alternatives and select the solution to be implemented
- 6. Ability to elaborate solid arguments to convince and motivate decision makers, select the proper LSCM partners and then plan and coordinate the project to implement the solution

#### Programme Specific Outcomes for MBA Logistics & Supply Chain Management (PSO's)

- 1. Manage the procurement and logistics function efficiently and effectively and understand how procurement can be used to gain value for money and the improvement performance for organizations.
- 2. Equip learners with the basics of public procurement, comprehend and understand the applicability of the PPDA act and regulations, and auditing, and investigations skills and the use and impact of using internet procurement in all procurement activities.
- 3. Develop corporate procurement and logistics management strategy in line with the corporate strategic objectives and goals and be able to negotiate contracts effectively.
- 4. Analyze the design, planning, and activities of marketing, production and operations, logistics networks and inventory which support domestic and global supply chain operations and be ability to solve logistical problems.
- 5. Formulate a framework for a viable and sustainable supply chain and defend it by identifying and addressing relevant supply chain relationship, risks, disputes, drivers, objectives and goals.
- 6. Address accountability and budgeting issues in procurement and logistics management and be able to make decisions pertaining to operations of supply chains and logistics networks.
- 7. Apply, promote, protect and disseminate Islamic ideas, ethics, vision, mission and values in regard to procurement and logistics management.
- 8. Demonstrate critical thinking, modeling, decision making and problem solving skills in a variety of contexts related to procurement, logistics and the entire supply chain.
- 9. Communicate supply chain decisions in a professional written and oral manner. Understand and apply knowledge gained on global logistics management, e-logistics, business transportation, strategic businesses and marketing channels, and advanced logistics problem.
- 10. Acquire leadership skills in core areas including supervising, purchasing, inventory control, supply chain, production and economic aspect of the business.
- 11. Enable learners understand general management principles, marketing aspects, human resource aspects and record keeping of all documentations in supply chain management.
- 12. Expand candidate's expertise and creativity in using software and translates creative ideas into practice.

### **Program Thrust Areas:**

#### **Logistics and Supply Chain Management**

- Basics of Logistics and Supply Chain Management
- Distribution Management for Global Supply Chain
- Procurement, Storage and Warehouse Management
- Port and Airport Management for Logistics
- International Logistics and Management
- Containerization and Multimodal Transport
- Supply Chain Risk Modeling and Management
- Applied GIS and Spatial Data Analytics
- Public Private Partnership and Port Development
- Supply Chain Software's
- Inventory Management & Material Requirements Planning

#### **COURSE CURRICULUM GUIDELINES**

*Eligibility criteria for Admission into MBA: Logistics & Supply chain Management:* Bachelor's (10+2+3) Degree in any discipline with 50 per cent marks or equivalent grade as recognized by Pondicherry University or as recognized by UGC.

*Selection Procedure:* Selection will be based on an all India level entrance examination to be conducted by Pondicherry University. The short-listed candidates in the written examination, as per the cut off marks fixed for the various reservation categories, will be admitted into MBA: Logistics & Supply Chain Management Program.

*Choice Based Credit System (CBCS):* The MBA Logistics & Supply Chain Management Degree program is offered through a unique 'Choice Based Credit System' (CBCS PU Regulations 2019). Under Choice Based Credit System, subjects are classified into Hard Core and Soft-Core Papers. Hard Core subjects are compulsory. The students have a choice to select from among the list of Soft Core papers offered within the department and by other departments.

*Weightage of Marks*: The weightage of marks between continuous Internal Assessment and End Semester Examination shall be 40 and 60 respectively.

**Passing Minimum:** A student is declared to have passed a given subject only when he/ she secures a minimum of 40 marks in the end-semester examination and an aggregate of 50% marks (both Internal and End-Semester Examination put together). There is no minimum passing marks for the internal assessment component.

*Internal Assessment Components:* The weightage of 40 marks for Internal Assessment Components shall consist of the following components.

	Total	: 40 marks
2.		. 10 marks
2	Two Written Assignments (5+5)	: 10 marks
1.	Two Class Tests (15+15)	: 30 marks

*Evaluation of End Semester Written Examination:* The answer scripts of the End Semester Examination shall be evaluated for a weightage of 60 marks. As per (CBCS PU Regulations 2019). The average of the marks awarded by both Internal and External examiners shall be taken for providing the Grades.

*Comprehensive Viva-voce Examination:* The End Semester Comprehensive Viva-Voce Examination shall carry a weightage of 50 marks and this will be evaluated by two Internal Examiners. The list of Internal Examiners is to be approved by the Dean, School of Management from a panel of Internal Examiners to be submitted by the Head of the Department.

*Summer Project:* Every student of MBA: LSCM shall carry out a project in any leading business organization (preferably in an MNC) for a period of 8 weeks during summer vacation (May& June) under the guidance of a Faculty Member in the Department. Once guides are allotted to the students, the students should contact the respective guides periodically and get necessary guidance and feedback on the project work. At the end of the project period, every student shall make a presentation of his/ her project work and shall submit a structured project report as approved by the Faculty Guide within 15 days from the date of the completion of the project period.

The Summer Project Report and Viva-Voce examination will be evaluated by two Internal Examiners. The list of Internal Examiners is to be approved by the Dean, School of Management from a panel of Internal Examiners to be submitted by the Head of the Department. Summer Project Report will be valued for a weightage of 100 marks and Viva –Voce examination for the Summer Project shall carry a weightage of 50 marks (Total 150 Marks). The Summer Project marks obtained by the students will be recorded in the mark statement issued to them in the Third Semester (along with the third semester marks).

*Internship:* Every student of MBA: LSCM shall undergo Internship training during the Third Semester of the program. This Internship shall be for 2 days (Fridays & Saturdays) in all the weeks of the entire Third Semester. During this Internship, every student should attach himself/ herself with any organization carrying on any type of international operations or transactions. The objective of the Internship training is to give the students a hands-on experience of real-life business operations. At the end of the Third Semester, each student should submit an Internship Training Report explaining clearly what each student has learnt during the Internship period. The Internship Report and the Viva-Voce Examination will be

evaluated by the internal Faculty Guide. The Weightage for the Internship Report shall be 75 marks and weightage for Viva-Voce Examination shall be 25 marks (Total 100 marks).

*Final Project:* Every student of MBA: LSCM should carry out a project in any leading business organization (preferably in an MNC) for a period of 8 weeks during the first part of the Fourth Semester <u>till the third week of February</u>. Once the guides are allotted to the students, the students should contact the respective guides periodically and get necessary guidance and feedback on the project work. At the end of the project period, every student shall submit a structured project report as approved by the Faculty Guide within the period specified by the Department.

The Final Project Report and Viva-Voce examination will be evaluated by two Internal Examiners. The list of Internal Examiners is to be approved by the Dean, School of Management from a panel of Internal Examiners to be submitted by the Head of the Department. Final Project Report will be valued for a weightage of 150 marks and Viva – Voce examination for the Final Project shall carry a weightage of 50 marks (Total 200 Marks).

#### **Question Paper Pattern:**

The question paper pattern for each of the subjects for the End-Semester Written Examination (For 60 Marks) shall be as given

#### Part A

Consist of 10 short answer questions each carrying two (02) marks (two questions should be asked from each Unit).  $(10 \times 2 = 20 \text{ marks})$ 

#### Part B

Five questions are to be answered (Either/Or pattern) each carrying six (06) marks (two questions will be asked from each Unit). (5 X 6 = 30 marks)

#### Part C

A compulsory question consisting a Case study/ Problem in the relevant Subject. (1 X 10 = 10 marks)

<u>Industrial / Port Visits</u>: Industrial Visit (Industrial Study Tour) shall be the compulsory component of the MBA: LSCM Program. Such tour will be organized with the approval from the appropriate authorities of the University. It is also resolved that one- three teachers along with few Ph.D full time scholars of the Department by rotation will be accompanying the students. Attendance: Each student shall obtain 70 per cent attendance to be eligible for appearing for the Semester-End Examination.

*Grading:* Grading of the marks obtained by the students shall be made as per the norms of Choice Based Credit System (CBCS) in the same manner as followed in other Departments of Pondicherry University.

#### **PROGRAM DETAILS**

#### (MBA – Logistics and Supply Chain Management)

Total Number of Credits	-	105
<b>Total Number of Theory Papers</b>	-	30
Total Number of Project Work	-	2
Total Number of Internship	-	1
Total No. of Comprehensive Viva-Voce	-	4

#### (MBA – Logistics and Supply Chain Management)

Mode of Evaluation for Continuous Internal Assessment (Weightage of Marks-40):

Two Class Tests, Two Written Assignments, and any of these following components: Attendance/ Mini Projects / Seminars / Quizzes (announced and / or unannounced case analysis and case discussion / Term Paper Class Participation / Assessment of Class Notes etc. End-Semester Examination (Weightage of Marks – 60):

At the end of the Semester a three-hour written examination will be conducted covering the entire syllabus

### DETAILED COURSE STRUCTURE MBA Logistics and Supply Chain Management

	FIRST SEMESTER				
Code	Course	Credits	Marks	Hard/Soft Core	
LSCM211	Principles of Management	3	100	Н	
LSCM212	Managerial Economics	3	100	Н	
LSCM213	Accounting and Finance	4	100	Н	
LSCM214	Quantitative Techniques	4	100	Н	
LSCM215	Global Business Environment	3	100	Н	
MIBA414	International Trade Procedures & Documentation	3	100	Н	
LSCM216	Public Private Partnership And Port Development	3	100	S	
LSCM217	Comprehensive Viva-Voce	2	50	Н	
	Total	25	750		

SECOND SEMESTER					
Code	Course	Credits	Marks	Hard/Soft Core	
LSCM 218	Procurement, Storage and Warehouse Management	4	100	Н	
LSCM219	Marketing Management	3	100	Н	
LSCM220	Basics of Logistics and Supply chain Management	3	100	Н	
LSCM221	Human Resources Management	3	100	Н	
LSCM222	Financial Management	4	100	Н	
LSCM223	Research Methods for Business	4	100	Н	
LSCM224	Production and Operations Management	4	100	Н	
LSCM225	Comprehensive Viva-Voce	2	50	Н	
		27	750		

	THIRD SEMESTER						
Code	Course	Credits	Marks	Hard/Soft Core			
LSCM227	Distribution Management for Global Supply Chain	3	100	Н			
LSCM228	Applied GIS & Spatial Data Analytics	3	100	S			
LSCM229	Port and Airport Management for Logistics	3	100	Н			
LSCM230	Supply Chain Softwares	3	100	S			
LSCM231	International Logistics and Management	3	100	S			
	Elective – I	3	100	Н			
	Elective – II	3	100	Н			
	Elective – III	3	100	Н			
LSCM232	Export Import Internship	2	100	S			
LSCM233	Comprehensive Viva-Voce	2	50	Н			
LSCM226	Summer Project – 6-8 Weeks (May- June) Project Report – 100 Marks+ Viva Voce-50 Marks)	4	150	Н			
	Total	32	1150				

	FOURTH SEMESTER					
Code	Course	Credits	Marks	Hard/Soft Core		
LSCM234	Containerization & Multimodal Transport	3	100	S		
LSCM235	Supply Chain Risk Modeling & Management	3	100	Н		
	Elective – IV	3	100	Н		
	Elective – V	3	100	Н		
	Elective – VI	3	100	Н		
LSCM236	Comprehensive Viva-Voce	2	50	Н		
LSCM237	PROJECT WORK (8 Weeks) (Project Report – 150 Marks + Viva-Voce – 50 Marks)	4	200	Н		
	Total	21	750			

\*The Code Number for Elective Subjects will be followed as per the Elective Course in the specialization stream chosen by the students.

### LIST OF ELECTIVE COURSES

	MARKETING					
Course Code	Course Title	Credits	Marks	Hard/ Soft Core		
MIBA 601	Global Buyer Behaviour	3	100	Н		
MIBA 602	International Sales Promotion and Brand Management	3	100	Н		
MBIA 603	Services Marketing	3	100	Н		
MIBA 604	Retail Marketing	3	100	Н		
MIBA 605	International Marketing Research	3	100	Н		
MIBA 606	Environmental Marketing	3	100	Н		
MIBA 607	Customer Relationship Management	3	100	Н		
MIBA 608	Industrial Marketing	3	100	Н		
MIBA 609	Sales and Distribution Management	3	100	Н		
MIBA 610	Marketing of Hi-Technology Products and Innovations	3	100	Н		
MIBA 611	New Product Development	3	100	Н		
MIBA 612	Digital and Social Media Marketing	3	100	Н		
MIBA 613	Innovation and Startup Management	3	100	Н		

	FINANCE					
Course Code	Course Title	Credits	Marks	Hard/ Soft Core		
MIBA 621	Global Financial Markets and Instruments	3	100	Н		
MIBA 622	Global Mergers and Acquisitions	3	100	Н		
MIBA 623	International Investment and Portfolio Management	3	100	Н		
MIBA 624	Financial Services and Derivatives Management	3	100	Н		
MIBA 625	Global Asset Backed Securities	3	100	Н		
MIBA 626	Corporate Tax Planning and Management	3	100	Н		
MIBA 627	International Accounting	3	100	Н		
MIBA 628	Foreign Exchange Management	3	100	Н		
MIBA 629	International Taxation	3	100	Н		
MIBA 630	International Banking	3	100	Н		

	HUMAN RESOURCE					
Course Code	Course Title	Credits	Marks	Hard/ Soft Core		
MIBA 641	HR for Knowledge Based Organisations	3	100	Н		
MIBA 642	Global Leadership and Skills Development	3	100	Н		
MBIA 643	Technology for H R Value Creation and Management	3	100	Н		
MIBA 644	Global Human Resource Development	3	100	Н		
MIBA 645	Industrial Relations and Labour Legislations	3	100	Н		
MIBA 646	Advanced Behavioural Science	3	100	Н		
MIBA 647	Performance Management Systems	3	100	Н		
MIBA 648	Organisation Development	3	100	Н		
MIBA 649	Training and Development	3	100	Н		
MIBA 650	HRD Score Card 2500	3	100	Н		
MIBA 651	Intellectual Property Rights	3	100	Н		

	SYSTEMS				
Course Code	Course Title	Credits	Marks	Hard/ Soft Core	
MIBA 661	Enterprise Resource Planning	3	100	Н	
MIBA 662	Cyber Crimes and IT Laws	3	100	Н	
MBIA 663	Data Mining and Data Warehousing	3	100	Н	
MIBA 664	Software Project Management	3	100	Н	
MIBA 665	Cloud Computing and Accounting	3	100	Н	
MIBA 666	Marketing Analytics	3	100	Н	
MIBA 667	Fin Tech	3	100	Н	

<b>OPERATIONS</b>					
Course Code	Course Title	Credits	Marks	Hard/ Soft Core	
MIBA 681	Inventory Management & Material Requirement Planning	3	100	Н	
MIBA 682	Modeling Techniques and IT for Operations Management	3	100	Н	
MBIA 683	World Class Manufacturing	3	100	Н	
MIBA 684	Productivity Management	3	100	Н	
MIBA 685	Quality Management	3	100	Н	
MIBA 686	Advanced Operations Research	3	100	Н	

## FIRST SEMESTER

## **MBA Logistics and Supply Chain Management**

#### **LSCM 211 PRINCIPLES OF MANAGEMENT Objectives:** 1. To give comprehensive view on management process in the corporate world 2. To understand the Global Management Practices and its nuances in the emerging business environment. 3. To apply the suitable Global Management Practices in Domestic and MNCs operations **Learning Outcomes:** 1. Would help in understanding the management process in the corporate world. 2. Students will be capable to apply the suitable Global Management Practices in Domestic and MNCs operations. Unit Description Hours Overview of Management: Recent Developments in Management Practices - Management as Profession - Functions of Management and its Practice 09 1 in New Business Environment - Comparative Management Practices -Technology based Management Practices – Change Management – Managerial Opportunities and Challenges. International Management: Evolution of International Business Operation -09 Relevance of International Management - Factors affecting International 2 Management - Models of Comparative Management - Management practices in USA, Chine, European Union, Japan and Emerging Economies. Global Business Environment: Management in Globalized Environment -09 Global Trade and Foreign Direct Investment - Role of Government and 3 Institutions in Regulating Management Practices- Merger and Acquisition and its implication on Management Practices - Ethics and values in International Management Practices. Global Management Strategy: Understanding global strategy- Diagnosing 09 industry global potential- Managing global competitive dynamics-4 Leveraging resources and capabilities - Entering foreign markets- Making strategic alliances and networks work - Diversifying, acquiring, and restructuring- Strategizing with Corporate Social Responsibility. 09 Management Functions in International Companies: Organizational Structure – International Production and Sourcing – International Human 5 Resource Management - International Management of Selected Value Chain Activities- The Value Chain - Accounting in the International Business- Internationalization of Services - International Controlling -Challenges in International Management Practices. Text Books: 1. Helen Deresky (2016): International Management – Managing Across Borders and Cultures, 9<sup>th</sup> Edition, Pearson Fred Luthans& Jonathan Doh (2012), International Management – Culture, Strategy 2. &Behavior, 9<sup>th</sup> Edition, Pearson 3. Dirk (2009): Strategic International Management – Text and Cases, Springer **Reference Books:** 1. Charles W.L. Hill (2012) International Management, 8th Edition by McGraw

Hill/Irwin

#### LSCM 212 MANAGERIAL ECONOMICS

#### **Objectives:**

- 1. To help in managerial decision making in order to achieve desired economic goals.
- 2. To think systematically while solving business issues and also to forecast the future.
- 3. To enhance the ability to apply fundamental economic concepts to complex business realities.

#### **Learning Outcomes:**

- 1. The Students will be capable of making a managerial decision in order to achieve a desired economc goal.
- 2. Increases systematical thinking and enhance the ability to apply fundamental economic concepts to complex business realities.

DescriptionIntroduction: Nature and Scope of Managerial Economics - Significance of Economics in Management – Objectives of a firm – Managerial economist's role and responsibilities – Fundamental economic concepts.Demand Analysis: Individual and Market demand functions – Law of demand – Determinants of demand – Elasticity of demand – Price elasticity, income elasticity and cross elasticity – using elasticity in managerial decisions – Demand forecasting techniques – Law of supply.Production analysis: Factors of production - Production function – Law of variable proportion - Economies of scale – Law of Returns to scale. Cost analysis: Types of costs - Cost of production – Cost output relationship in the Short run and long run – their nature, shape and inter relationship – Break-even analysis.Market Structure: Price determination under perfect competition –	Hours           09           09           09           09		
<ul> <li>Economics in Management – Objectives of a firm – Managerial economist's role and responsibilities – Fundamental economic concepts.</li> <li>Demand Analysis: Individual and Market demand functions – Law of demand – Determinants of demand – Elasticity of demand – Price elasticity, income elasticity and cross elasticity – using elasticity in managerial decisions – Demand forecasting techniques – Law of supply.</li> <li>Production analysis: Factors of production - Production function – Law of variable proportion - Economies of scale – Law of Returns to scale. Cost analysis: Types of costs - Cost of production – Cost output relationship in the Short run and long run – their nature, shape and inter relationship – Break-even analysis.</li> <li>Market Structure: Price determination under perfect competition –</li> </ul>	09		
<ul> <li>demand – Determinants of demand – Elasticity of demand – Price elasticity, income elasticity and cross elasticity – using elasticity in managerial decisions – Demand forecasting techniques – Law of supply.</li> <li>Production analysis: Factors of production - Production function – Law of variable proportion - Economies of scale – Law of Returns to scale. Cost analysis: Types of costs - Cost of production – Cost output relationship in the Short run and long run – their nature, shape and inter relationship – Break-even analysis.</li> <li>Market Structure: Price determination under perfect competition –</li> </ul>			
<ul> <li>variable proportion - Economies of scale – Law of Returns to scale. Cost analysis: Types of costs - Cost of production – Cost output relationship in the Short run and long run – their nature, shape and inter relationship – Break-even analysis.</li> <li>Market Structure: Price determination under perfect competition –</li> </ul>	09		
Monopoly Market – Duopoly - Monopolistic competition - Oligopoly – Game theory - Pricing methods.	09		
Macro Economic Environment: National income concepts, measurement – In India - International Comparison - uses of National Income – difficulties in calculation – Nature and phases of Business cycle – Theories of Business cycle. Inflation – Demand pull and cost-push inflation – effects of inflation and control measures- Government Policies – Fiscal and Monetary Policy – External Sector Policies	09		
Books:			
arl E. Case and Ray C. Fair (2015), "Principles of Economics", 3rd edition, Pear	son		
Education. 2. Christopher R Thomas, S. Charles Maurice (2014) "Managerial Economics",10 <sup>th</sup> edition TaTa Mc Graw Hill.			
Reference Books:			
Craig H. Peterson and Cris W. Lewis (2005) "Managerial Economics",	Pearson		
<ul> <li>Education,</li> <li>2. Michael R. Baye (2006) "Managerial Economics and Business Strategy", Mc.Graw Hill</li> <li>3. Dominick Salvatore (2009) "Managerial Economics – Principles and worldwide application"6<sup>th</sup> edition, Oxford Higher Education.</li> <li>4. Gregory N Mankiw (2012) "Principles of Economics" Cengage Learning.</li> </ul>			
	<ul> <li>Monopoly Market – Duopoly - Monopolistic competition - Oligopoly – Game theory - Pricing methods.</li> <li>Macro Economic Environment: National income concepts, measurement – In India - International Comparison - uses of National Income – difficulties in calculation – Nature and phases of Business cycle – Theories of Business cycle. Inflation – Demand pull and cost-push inflation – effects of inflation and control measures- Government Policies – Fiscal and Monetary Policy – External Sector Policies</li> <li>Books:</li> <li>arl E. Case and Ray C. Fair (2015), "Principles of Economics", 3<sup>rd</sup> edition, Pear ducation.</li> <li>bristopher R Thomas, S. Charles Maurice (2014) "Managerial Economics",10<sup>th</sup> Mc Graw Hill.</li> <li>rence Books:</li> <li>Craig H. Peterson and Cris W. Lewis (2005) "Managerial Economics", 4tion, ichael R. Baye (2006) "Managerial Economics and Business Strategy", Mc.Graminick Salvatore (2009) "Managerial Economics – Principles and worldwide blication"6<sup>th</sup> edition, Oxford Higher Education.</li> </ul>		

5. Robert J Michaels (2011) "Economics for Managers- Transaction and Strategy" Cengage Learning.

	LSCM 213 ACCOUNTING AND FINANCE			
Objec	tives:			
•	To acquaint the students with the fundemantal principles of finanica	1 Cost		
	&Management Accounting.	, 0050		
2	To enable the students to take decisions using managemnt accounting tools.			
	To expose the students to financial management for making efficient inv	estment		
5.	decisions.	estiment		
Learn	ing Outcomes:			
	Students Gain the knowledge of fundemantel principles of financial, C	ost &		
	Management Accounting.			
2	Provides the capability to make decisions using management accounting to	ols and		
2.	also to make effective investment decisions.	ons and		
	diso to make effective investment decisions.			
Unit	Description	Hours		
em	Book-Keeping and Accounting – Objectives of Financial Accounting –	IIOUIS		
	Branches of Accounting : Financial, Cost and Management Accounting -			
1	Accounting Conventions - Journal – Ledger- Trial Balance – Preparation of	09		
-	Trading, Profit and Loss Account and Balance Sheet – Capital and Revenue	07		
	Expenditure- Deferred Revenue Expenditure – Capital and Revenue Receipts			
	– Depreciation – Causes and need for depreciation – Different Methods of			
	Calculating Depreciation - DepreciationAccounting.			
	Financial Statements Types of Financial Analysis – Techniques of Financial			
	Analysis – Comparative Statements, Common Size Statements -Ratio			
2	Analysis – Profitability Ratios – Coverage Ratios – Turnover Ratios –	09		
-	Financial Ratios - uses and limitations of Ratio Analysis – Funds Flow	07		
	Analysis – uses and limitations - Cash Flow Analysis – uses and limitations –			
	Difference between funds flow and cash flow analysis.			
	Marginal Costing –Cost Volume Profit Analysis – Breakeven Analysis – Key			
	Factor – Profit Planning - Decisions involving Alternative Choices:			
3	Determination of sales mix, exploring new markets and Make or Buy	09		
•	decisions. Costing – Elements of Cost – Cost Accounting – Objectives –	07		
	preparation of Cost Sheet (Problems) – Classification of cost – Cost Unit and			
	Cost Centre – Methods of Costing – Techniques of Costing.			
	Nature and Scope of Finance – Finance Functions – Changing Role of			
	Finance Manager – Objectives of Finance – Profit Maximization Vs Wealth	09		
4	Maximization – Major Financial Decision Making Areas – Sources of Funds			
•	– Short-Term & Long-Term Funds.			
	Time Value of Money – Cost of Capital – Calculation of Cost of Capital –			
	Capital Structure – Theories of Capital Structure – Capital Budgeting –	09		
5	Dividend Policies - Working Capital Management.	07		
	<b>Text Books</b> 1. Grewal T S (2016) MANAGEMENT ACCOUNTING, Sultan Chand & Sons Private Limited			
1. 2.		Linneu		
	<ol> <li>Maneswart S.N (2014) COST &amp; MANAGEMENT ACCOUNTING, Suitan Chand.</li> <li>Bhattacharyya (2012), ESSENTIALS OF FINANCIAL ACCOUNTING, Prentice Hall</li> </ol>			
	ence Books:			
1.		l <b>.</b>		
2.	Horngren T. Charles, (2000) COST ACCOUNTING, Prentice Hall.			
	Kaplan D (2012) INTRODUCTION TO FINANCIAL STATEMENT ANALYSIS,	Kaplan		
	Group.	_		

	LSCM 214 QUANTITATIVE TECHNIQUES		
Objec	tives:		
•	1. To expose the students to various Statisticals and Operations research tools for dat analysis.		
2.	To enable the students to interpretation the results.		
	To facilitate them to take objective decisions based on the models.		
	ing Outcomes:	1 0	
1.	The students gain knowledge of various Statisticals and Operations research t data analysis.	ools for	
2.	It helps to interpret the results and to take objective decision based on the mod	lels.	
Unit	Description	Hours	
1	Measures of Central Tendency: Arithmetic Mean, Weighted Arithmetic Mean, Mean, Median Mode – Measurement of Variance: Range, Quartile deviation, Average deviation, Standard deviation, Coefficient of variance – Probability: Concept and theorems, Binomial, Poisson and Normal distribution - Determinate of Confidence interval	09	
2	Hypotheses testing: Errors in testing – one tail & two tail testing – one sample t test and two sample t tests – paired t test – F test – ANOVA: one way and two way.	09	
3	Non-Parametric statistics: Sign test, Runs test – Chi Square test – Mann Whitney –Wilcoxin test – Krushal Wallis – Friedman tests – Spearman's Rank Correlation.	09	
4	Pearson Correlation and Regression analysis - Basics of Multivariate Analysis: Factor analysis - Cluster analysis - Discriminant Analysis - Multiple Regression - Multiple Analysis of variance.	09	
5	Linear programming: Problem formation, Graphical Method, Simplex – Transportation: Basic feasibility solution, Optimization Methods - Assignment – Game Theory: Saddle point, Dominance and Mixed strategy.	09	
Text ]	Books		
1. Sh		AND	
3. M	3. Mustafi C. K, (2008) STATISTICAL METHODS IN MANAGERIAL DECISIONS"		
	acmillan, India. ence Books:		
	win, I Richard, (2006) STATISTICS FOR MANAGERS, Prentice-Hall, India.		
TI	E BEHAVIOURAL SCIENCES, McGraw Hill College, India.		
	air Joseph and Anderson Rolph (2010) MULTIVARIATE DATA ANALYSIS,	Prentice	
4. Ai	all, India. aderson R David et. al., (2009) South-Western College Pub QUANTI THODS FOR BUSINESS South Western College, India.	<b>`ATIVE</b>	

#### **LSCM 215 GLOBAL BUSINESS ENVIRONMENT**

#### **Objectives:**

1. To understand about various factors that are having impact on the functioning of business

2. To study the impact of International factors that influences the business

3. To know about the important bilateral and multi-lateral economic cooperation agreements

#### **Learning Outcomes:**

1. Students gain the knowledge of various factors that have an impact on the functions of the business.

2. Helps to know the important bilateral and multi-lateral economic cooperation agreements.

Unit	Description	Hours
1	Basics of International Business, Modes of entry in to International Business; Frame work for analyzing international business environment; Institutional support to International Business UNO, IMF, World Bank; UNCTAD; WTO.	09
2	Factors affecting Socio-Cultural environment, Impact of Socio-Cultural environment on Business, Factors affecting Technological environment, Impact of Technological environment on Business, International Technology Transfers – importance and types, Foreign Technology Acquisition.	09
3	Economic Environment International financial system, Foreign Exchange Markets: Determining exchange rates; Fixed and flexible exchange rate system; Participants in the Foreign exchange markets; Cash and Spot exchange market; Exchange rate quotes; LERMS; Factors affecting exchange rates – spot rates, forward exchange rates, forward exchange contracts; Foreign Exchange Risk: Transaction exposure, translation exposure and economic exposure, Management of exposures.	09
4	Political and legal environment - Legislature, Executive, Judiciary - Multinational Corporations: Conceptual Frame work of MNCs - MNCs and Host and Home Country relations - Foreign investment flows and barriers. Ecological issues.	09
5	Regional Economic Co-operation and Integration between Countries; Different levels of integration between Countries; European Union, NAFTA, ASEAN, EFTA, SAARC, SAPTA, The ANDEAN community, MERCOSUR.	09

#### Text Books:

- 1. F.Adhikary, Manab, Global Business Management, Macmillan, New Delhi
- 2. Black and Sundaram: International Business Environment, PHI New Delhi.
- 3. F. Buckley, Ardin: The Essence of International Money, PHI New Delhi

#### **Reference Books:**

- 1. Bhattacharya, B: Going International Response Strategies for Indian Sector, Wheeler
- 2. Gosh, Biswanath, Economic Environment of Business, South Asia Book, New Delhi
- 3.Letiche, John M: International Economics Policies and Theoretical Foundations, Academic Press. New York

4. Tayeb, Monis H: The Global Business Environment – An Introduction, Sage Publication, New Delhi

Objec	tives	
	To understand India's contribution in International Trade and Service	
2.	To know the Export and Import Documents used in Global Trade	
3.	To identify futre opportunties and chellenges of India's Foreign Trade	
Learn	ing Outcomes:	
	To identify future opportunities and challenges of India's Foreign Trade.	- 1
2.	Students gain the knowledge of Export and Import Documents used in Global	Trade.
Unit	Description	Hours
1	International Trade: Need and importance of International Trade – Recent Trends in World Trade – Leading players – India's Foreign Trade – Commodity composition and Destination – India's Export and Import position in World merchandise trade and services –Project Exports- Deemed Exports - India's Foreign Trade Policy – India Trade Agreements and tariff benefits	09
2	Starting an Export Organization: Starting an export firm – Selection of an export product – Market selection –Buyer selection - Registration procedure with Sales Tax, Central Exercise and various Boards and councils – Exim code number – Elements of export contract- Global rules as UCP 600 of ICC, INCOTERMS – Terms of payment and Letter of Credit – Payment settlement of exports and Imports	09
3	Export Documentation: Types of documents – Primary Documents – Regulatory Documents - Transport, Negotiation and Insurance documents – E- Databases and Documents	09
4	Export Finance: Sources of Finance - Role of commercial bank, EXIM Bank, ECGC SIDBI and others – Export promotion Schemes – Insurance for Export – Types – export credit insurance – Risk Management – Types of risks – mitigation methods.	09
5	Import Procedure and Documentation: Global sourcing – Types of global procurement – Tender – Negotiation – Contract and others – Customs regulations and import clearance formalities – Types of import licenses - Export Promotion Capital Goods Scheme (EPCG) license- Duty exemption scheme –Import formalities for EOUs and SEZs –CEZ - Import Risk Management.	09
Text B	ooks:	
	Aseem Kumar(2007) "Export and Import Management", Excel Books Publications, N	New
	Delhi	
	David Stewart (2008)" International Supply Chain Management", Cengage publication	
3.		hi
	nce Books:	
1. 2.	P.K.Khurana (2010): Export Management, Galgotia Publication, New Delhi Jeevanandam C(2002) "Foreign Exchange: Practices Concepts and control" Sulta Publications	an Chan
3.	Foreign Trade Policy(2015-2020): Hand book of Export Procedure and Annua Ministry of Commerce, Government of India.	al of th

#### LSCM 216 PUBLIC PRIVATE PARTNERSHIP AND PORT DEVELOPMENT

#### **Objectives:**

1. To introduce the unique characteristics, models, financial approach, institutional and legal framework and lessons learned from the PPP projects.

#### Learning Outcomes:

1. Students understand the roles, models and benefits of PPP projects.

Unit	Description	Hours
1	Introduction to Public Private Partnership:Definition - History - Roles - Benefits - Output-based approach - PPP and Privatization- PPP Models - Indian Scenario - Stumbling Blocks - Government initiative - Policyframework - Partnership architecture - Procedural network - Institutional structure.	09
2	Risk Identification and Financial Approach: Risk: Identification - Mitigation - Allocation. Financial Approach: General Factors Deciding determinants - Financial involvements - Sources and tools – Costcomponents and financing sequence.	09
3	Contractual, Legal and Regulatory Framework:Contractual Framework: Concession contract's Features - Concession contract and aCommercial contract - Concession arrangement - Critical issues – Unsolicitedproposals - Contractual Structure. Legal Framework: Existing legal framework Infirmities. Regulatory Framework: Regulatory body - Functions Contracting outregulatory functions - Regulation by contract - Indian Scenario – Independent regulators.	09
4	Infrastructure: Salient Features - Importance - Types - Commercialisation of Infrastructure Infrastructure and Environment - Infrastructure and the poor- Policy framework Indian Scenario - Phases of project development - Slow progress.	09
5	Indian Port Sector and PPP projects: Indian Ports: Major ports - Corporate ports - Non-major ports - Changing Trends PortManagement Models. Indian Ports and PPP: Nhava Sheva International ContainerTerminal - Kakinada Deep Water Port - Gangavaram Port.	09

#### **Text Books:**

1. JOSHI, R. N. (2013) Public Private Partnership in Infrastructure: Perspectives, Principles and Practices. Vision Books: New Delhi.

2. ASIAN DEVELOPMENT BANK (2008) Public-Private Partnership Handbook. ADB: Manila.

#### **Reference Books**

1. ASIAN DEVELOPMENT BANK (2012) Public - Private Partnership Operational Plan 2012 - 2020. ADB: Manila

2. WORLD BANK (2007) Port Reform Tool Kit. World Bank: Washington.

3. INFRASTRUCTURE DEVELOPMENT FINANCE COMPANY LIMITED (2012)

Evolving Perspectives in the Development of Indian Infrastructure Vol. I&II.

Orient Blackswan Private Limited: Hyderabad, India.

## **SECOND SEMESTER**

## **Logistics and Supply Chain Management**

#### LSCM 218 PROCUREMENT, STORAGE AND WAREHOUSE MANAGEMENT

#### **Objectives:**

- 1. Provides know-how required to operate an efficient and cost effective warehouse as also the role of inventory in warehouse management.
- 2. It provides guidance on using the latest technology, reducing inventory, people management, location and design and manage uncertainty risks of customer markets
- 3. Define the right structure of the supply network and inventory control and warehouse management system

#### Learning Outcomes:

- 1. Recognize the principles of warehouse or stores location and layout whilst applying proper stock flow, rotation and recording
- 2. Appreciate the role of procurement plays in an organization

Unit	Description	Hours
1	Objectives of Procurement System, Principles of Procurement, History of procurement function: from administrative to strategic, value added role, Procurement Cycle, Procurement Planning, Purchasing Mix: Six Rights, Selecting the right supplier, Source of information and process, Supplier appraisal/vendor capability, Bidding process.	09
2	Introduction to Warehousing Concepts -Role of warehouse-types of warehouse- warehouse location- Need for warehousing- Supply chain trends affecting warehouse –Warehouse functions- Role of warehouse manager-Warehouse process: e-commerce warehouse- Receiving and put away- Warehouse process – pick up preparation-Receiving - Pre-receipt - In- handling - Preparation - offloading - Checking - Cross-docking - Quality control - Put-away - Pick preparation - Pick area layout - Picking strategies and equipment -order picking methods - Warehouse processes- Replenishment to dispatch- Value adding services - Indirect activities - Stock management - Stock or Inventory counting - Perpetual inventory counts - Security - Returns processing – Dispatch.	09
3	Strorage Management system – Storage Inventory Management – Functions of storage & Inventory - Classification of Inventory- Methods of Controlling Stock Levels- Always Better Control (ABC) Inventory system- Warehouse Management Systems (WMS) - choosing a WMS-the process implementation-cloud computing- Warehouse layout-Data collection-space calculation-aisle width- finding additional space.	09
4	Storage and Warehousing Information system -Storage Equipment: storage option - shuttle technology - very high bay warehouse - warehouse handling equipment - vertical and horizontal movement - Automated Storage/ Retrieval System (AS/RS)-specialised equipment- Technical advancements- Resourcing a warehouse- warehouse costs- Types of cost - Return on Investment (ROI) - Charging for shared-user warehouse service - Logistics charging methods Warehousing	09

Information System (WIS)- Performance management- outsourcing decisions.

Material Handling and Warehouse safety Material handling- Product movement- concept- costs-product load activity—dispatch activityunload activity-control device-impact of the computer technologyautomatic identification-issues and trends in product transport--Packaging - Pallet - Stretch wraps - Cartons – Labeling- Health and safety- Risk assessment - Layout and design - Fire safety- Slips and trips - Manual handling - Working at height - Vehicles - Forklift trucks - Warehouse equipment legislation. Warehouse safety check list- Warehouse Environment- Energy production - - Product waste - waste disposal -Hazardous waste- Sustainable warehouse Management.

#### **Text Books:**

5

- 1. GWYNNE RICHARDS (2014) Warehouse Management: A Complete Guide to Improve Efficiency and Minimizing Cost in the Modern Warehouse. The Chartered Institute of Logistics and Transport, Kegan page limited.
- 2. DAVID E. MULCHY & JOACHIM SIDON (2008) A Supply Chain Logistics Program for Warehouse Management. Auerbachian Publications

#### References

- 1. Bowersox, D.J., Closs, D.J., Cooper, M.B., & Bowersox, J.C. (2013). Supply Chain Logistics Management. (4 th ed.), McGraw Hill/Irwin.
- Arnold, J.R., Chapman, S.N. (2012). The Introduction to Materials Management. (7 th ed.), Prentice-Hall. Coyle, J.J., Jr. Langley, C.J., Novack, R.A, & Gibson, B.J. (2013). Managing Supply Chains: A Logistics Approach. (9 th ed.), McGrawHill. Edward, F. (2002).
- 3. World-Class Warehousing and Material Handling. (International ed.), McGraw-Hill. Muller, M. (2011). Essentials of Inventory Management. (2 nd ed.), American Management Association.

#### LSCM 219 MARKETING MANAGEMENT

#### **Objectives:**

- 1. To understand the basic concepts of Marketing
- 2. To gain the knowledge of marketing management in the international perspective
- 3. To develop marketing strategies for the dynamic international markets.

#### Learning Outcomes:

- 1. Understanding the role of marketing in making satisfied exchanges.
- 2. Able to use the variables of marketing management for successfully doing the business in the International arena.

Unit	Description	Hours	
1	The Concept of marketing - Evolution of marketing: From transaction- based to relationship marketing- Marketing research and Decision support systems .Market Segmentation, Targeting and Positioning.	10	
2	Product Mix - Product management decisions, Branding and Packaging, Product Life Cycle strategies - New Product Development - Pricing considerations and approaches, Base Methods of setting Price, pricing strategies and Policies.	10	
3	Distribution channels and physical distribution. Marketing communication and Promotion mix Strategies. Nature of international marketing: meaning, Framework for International Marketing-Barriers for International Marketing	10	
4	International Marketing Decisions:product Planning,Designing and Development for international markets-Pricing Decisions:Pricing Strategies And Price setting For International Markets.	10	
5	Distribution:Channel Management And Physical distribution Management in International Marketing.Promotion:International Advertising Programs,Sales Management And Sales Promotion For Foreign Markets.	10	
Text Bo	Text Books:		
1. Philip	1. Philip Kotler, Marketing Management- The South Asian Perspective, Pearson Education		

2. Warren J. Kegan: Global Marketing Management' Pearson Education

#### **Reference Books:**

1. Svend Hollensen : Global Marketing: A Decision-Oriented Approach- , Pearson Education.

2. Ramasamy, Namakumari: Marketing Management, McMillan Publishers

3. Saxena: Marketing Management (Tata McGraw-Hill)

#### LSCM 220 BASICS OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

#### **Objectives:**

- 1. To understand the strategic role of logistics management
- 2. To study the important modes of logistics operations
- 3. To Know supply chain techniques in an international perspective.

#### **Learning Outcomes:**

- 1. Able to Understand the strategic role of Logistics and Supply chain Management in the cost reduction and offering improved service to the customers.
- 2. Combining the traditional physical distribution activity with modern Information
- Technology to have sustainable competitice advantage to the organization Globaly.

Unit	Description	Hours
1	Logistics management and Supply Chain management - Definition, Evolution, Importance. The concepts of logistics andSupply Chain Management, Key Drivers of Supply Chain Managementand Logistics relationships.	09
2	Basics of Transportation, Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; International Air Cargo Transport; Coastal and Ocean transportation, Characteristics of shipping transport-Types of Ships.	09
3	Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR;	09
4	Packing and Packaging: Meaning, Functions and Essentials of Packing and Packaging, Packing for Storage- Overseas Shipment- Inland-Transportation- Product content Protection, Packaging Types: Primary, Secondary and Tertiary- Requirements of Consumer Packaging, Channel Member Packaging and Transport Packaging - Shrink packaging –Identification codes, bar codes, and electronic data interchange (EDI)- Universal Product Code- GS1 Standards- package labels- Symbols used on packages and labels.	09
5	Special Aspects of Export logistics: Picking, Packing, Vessel Booking [Less-than Container Load(LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centers, distributors and lastly the retail outlets- Import Logistics: Documents Collection- Valuing- Bonded Warehousing- Customs Formalities- Clearing ,Distribution to Units.	09
Text Books	-	
1.Bowersox	x, Closs, Cooper, Supply Chain Logistics Management, McGraw Hill.	

2. Burt, Dobbler, Starling, World Class Supply Management, TMH.

- 3. Donald J Bowersox, David J Closs, Logistical Management, TMH
- 4. Pierre David, "International Logistics", Biztantra.

5. Sunil Chopra, Peter Meindl, Supply Chain Management, Pearson Education, India.

#### LSCM 221 HUMAN RESOURCE MANAGEMENT

#### **Objectives:**

- 1. To Understand the HRM Principle and Practices in the Domestic Context.
- 2. To Study the Global HRM Practices with Multicultural Nature compounded by Geographical Dispersion.
- 3. To Adopt the best Practices of Global HRM and its application to the Domestic and MNCs operating in India.

#### Learning Outcomes:

- 1. Helps the students to gain knowledge on HRM practices at various context.
- 2. Will help in adopting best practices of Global HRM.

$\frac{2}{\text{Unit}}$	Will help in adopting best practices of Global HKM.	Hours	
Unit	Description	Hours	
1	Human Resource Management: Evolution – Objectives – Significance – HR Planning –Recruitment & Selection – Training & Development – Performance Evaluation – Career Planning and Succession Domestic HRM v/s IHRM - Growth of Internationalization of World Business- Strategic Orientation of IHRM- International Assignments.	09	
2	IHRM Functions: Planning - International recruitment and selection - Training and Development of expatriates - International compensation: components, objectives and methods of Compensation - Taxation decisions - Changing trends in International employment-M & A –Integration of acquired employees in newer cultures, Global Mobility and HR-International postings.	09	
3	IHRM Challenges and Opportunities: Domestic and MNCs Perspectives – Managing Expatriation –Entry Level (Campus) Recruitment Women Expatriates – Risk Factors Associated with Expatriation – Special Provisions pertaining to Expatriate Labour Recruitment - Empanelment of Overseas Recruitment Agencies e-Migrate - Role of Indian Embassy - Staff Recruitment- Regions - MiddleEast, Africa and Asia Pacific- Repatriation -Process of repatriation, job related adjustments, organisational development.	09	
4	IHRM Employer-Employee Relation in MNCs – Contemporary Issues and New Directions of Industrial Relation – Changing Dynamics of Employees Union in MNCs Management – Conflict management - Relevance and returnes of Labour Laws – Grievances Handling in MNCs -Managing Diversity - Learning Organisation – Adopting and Managing changes.	09	
5	IHRM Strategies and Developments - Total quality in HRM - Scope of TQM - Comparison of Traditional and TQ HRM approaches - Barriers to TQHRM - HR project planning - Importance of computerized information system - IHRM Experiences of USA, UK, Japan and China.	09	
	Books:		
	ter J. Dowling & Denice E. Welch (2009) IHR M, Cengage wathappa k; SadhnaDash(2009) IHRM; Tata McGrawHill,		
	Reference Books:		
	1. Bhatia S.K. 2005. IHR M: A Global Perspective: Practices and Strategies for Competitive Success, Deep and Deep Book Publishers, New Delhi,		
<ol> <li>Dessler, G. (2005) Human Resource Management (10th Ed.), Prentice Hall Publishing</li> </ol>			
	3. Tony Edwards, Chrisrees: International Human Resource Management, Pearson,		

4. Indrani Mutsuddi: Managing Human Resources in the Global Context, New Age Publishers,

#### LSCM 222 FINANCIAL MANAGEMENT

#### **Objectives:**

- 1. The course provides an analytical framework of Financial Management
- 2. It enables how cross-border financing, valuation, risk management analysis
- 3. It analyses exchange rates, tax and legal issues and country risk.

#### Learning Outcomes:

- 1. Students gain the knowledge on Forex market, Exchange rate forecasting and Multi National capital budgeting techniques.
- 2. To make an attempt and highlight the International Financial Market, systems and Practices.

Unit	Description	Hours
1	Financial Management in a global perspective - IFM basic concept & challenges – International monetary system - Overview of international financial markets (Bond markets, Equity markets, Forex Market)-International Flow of Funds- International Portfolio Investments	09
2	Foreign Exchange Exposure and risk management- Exchange rate forecasting- volatility-Exposure types- Transaction Exposure, Translation exposure, Economic Exposure-Currency Derivatives-forward, futures & options-usage in firms as hedging tool.	09
3	Financial management of the MNC: Multinational Capital Budgeting – subsidiary Vs parent-MNC capital budgeting inputs and calculations-Multinational cost of capital - capital structure-factors influencing decisions-Long-term and Short-term financing decisions- Cash Management.	09
4	International Project Appraisal – Traditional and Modern Techniques (Present value approach) Country Risk Analysis –importance-risk factors and assessment –risk ratings – incorporating risk in capital budgeting. Understanding global economic indicators.	09
5	Introduction to valuation – Principles and practices – Tools and techniques – CAPM- Estimating discount rates-Estimating cash flows – Equity DCF models.	09
Text B	ooks	
<ol> <li>Jeff Madura, International Financial Management, 7th Edition, Thomson India.</li> <li>Jeff Madura, International Corporate Finance, ,8<sup>th</sup>Edition, SWcengage Indian Edition.</li> <li>Reference Books:</li> </ol>		
1.	Cheol S.Eun and Resnick, International Financial Management, SIE 4 <sup>th</sup> Edition, TMH Allen Shapiro, Multi-National Financial Management, Prentice-Hall of India	

3. Apte, P.G. International Financial Management, Fourth edition, Tata McGraw-Hill

Apic, F.G. International Financial Management, Fourier edition, Fata Meetraw-Time
 AswathDamodaran, Corporate Finance - Theory and Practice, Wiley & Sons Inc, 2<sup>nd</sup>Edn.

5. AswathDamodaran, Investment Valuation, Wiley ,2<sup>nd</sup> Edition.

	LSCM 223 RESEARCH METHODS FOR BUSINESS			
	ctives:			
$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$				
2. 3.				
	ning Outcomes:			
1.		rch		
1.	procedures.	i en		
2.	It also gives hands on experience on softwares used for data analysis.			
Unit	Description	Hours		
	Over view of Research methodology: Meaning and purpose - Types of			
	research: Exploratory, Analytical, Descriptive, Experimental and Case study.	09		
1				
	Research Focus: Problem definition, Selection and formulation – Review of			
	Literature - Delimitation of the scope of the study - Setting Objectives -	09		
2	Definition of the concepts - Formulation of hypothesis - Preparation of			
	Research design – Field work and Data collection.			
	Meaning of Hypothesis - Types of Hypothesis - Sources of hypothesis -			
	Testing of Hypothesis - Errors in Testing - Measurements - Scaling	09		
3	techniques and Scale Construction - Sample size - Sampling error -			
	Sampling Methods and Applications.			
	Data Collection: Primary and Secondary Data: Observation, Interview,			
	Telephonic Interview, Questionnaire – Internal and External source of	09		
4	Secondary data – Construction of Interview schedule and Questionnaire – Pre			
	testing and Pilot Study – Reliability and Validity tests – Processing and data			
	analysis: Checking, Coding, transcription and tabulation of data – Report			
	writing: Types of report, Contents of report, Styles and Conventions in report			
	writing - Steps in drafting a report: Cover page, Introduction, Text,			
	Bibliography and Appendix. Data Analysis using Computers: Software Packages – Parametric and Non			
	Parametric hypothesis testing – Correlation and Regression analysis – Time	09		
5	Series – Basic Multivariate analysis.	09		
5	Series – Dasie Multivariate analysis.			
Text Books				
1. K	rishnaswamy O R and Ranganatham M. (2014) METHODOLOGY OF RESEAU	RCH IN		
	OCIAL SCIENCES, Himalaya Publication, India.			
2. K	othari C R (2014), "RESEARCH METHODOLOGY: METHODS	AND		
T	ECHNIQUES", New Age India.			
3. Se	ekaran Uma and Bougie Roger (2010) RESEARCH METHODS FOR BUSIN	ESS: A		
SKILL BUILDING APPROACH John Wiley & Sons, 2010				
Reference Books:				
1. Kerlinger Fred and Lee B Howard (1999), FOUNDATIONS OF BEHAVIORAL				
RESEARCH, S.Chand				
	2. Hatt K Paul and Goode J William, (2016), METHODS IN SOCIAL RESEARCH, Asia			
	aw House.	TUODO		
	ooper R Donald and Schindler (1998) Pamela BUSINESS RESEARCH MET	THODS		
l Ir	win Professional Publishing			

#### LSCM 224 PRODUCTION AND OPERATIONS MANAGEMENT

#### Objectives

- 1. To introduce the production Process and Planning Process
- 2. To Familiarize the concepts of Operations
- 3. To expose the students to various models and techniques

#### Learning Outcomes:

- 1. Apply knowledge of business concepts and functions in an integrated manner.
- 2. Use specialized knowledge in Operations Management to solve business processes.

Uni	Description	Hours
t		
1	System concept of production –Production system – Productivity – World class manufacturing- process planning and design- selection of process- value analysis/value engineering-make or buy decision- capacity planning and forecasting- Demand pattern- Forecasting model-selection of forecasting techniques-SMA-WMA-Simple exponential smoothing, Linear regression – Delphi method	09
2	Facility location; factors influencing plant location-break even analysis- facility layout-basic formats-classification- process layout, Product layout and Group technology layout- advantages and limitation- systematic layout planning (SLP) – Concept of CRAFT, ALDEP, CORELAP- Assembly Line – Line balancing concept-Concept of mass production. Material management and inventory control – Components of material management- Purchase model with instantaneous replenishment and without shortage – Manufacturing model without shortage – Material handling system- unit load concept- material handling principle-classification of material handling equipments.	09
3	Aggregate sales and operation planning – Introduction – overview- Production planning environment. Material Requirement planning (MRP) - Product Structure/ Bill of material (BOM) – MRP System and overview- Production planning control- Planning phase-action phase- the control phase. Single machine scheduling (SMS); types of scheduling-concept of SMS- SPT rule to minimize mean flow time-minimizing weighted mean flow time – EDD rule to minimize maximum lateness-flow shop scheduling- Introduction to Johnson Problem – Extension of Johnson's rule.	09
4	Project management: CPM – PERT – GANTT chart/Time chart – work study-method study- time study – motion study. Quality control: Introduction- need to control quality- quality system- QC techniques- control charts for variables and attribute- Acceptance sampling – Operating characteristic curve – Single sampling plan.	09
5	Maintenance - planning and control - Maintenance Objectives –Types – Basic reasons for replacement- reliability – reliability improvement- reliability calculations- Modern production management tools- JIT manufacturing - Introduction to Six sigma concepts- TQM- Lean manufacturingKaizen.	09
	Books:	
	Thary S, (2017) "Production and Operations Management", McGraw Hill Education	T:
	'hunawalla S A and Pate D R, (2016), "Production and Operation Management", I ublishing House.	limalaya
	anneerselvam (2012) "Production and Operations Management", Prentice Hall India	
Refer	rence Books:	
1. W	Villiam J. Stevenson, (2017), "Operations Management", McGraw-Hill Education	

1. William J. Stevenson, (2017), "Operations Management", McGraw-Hill Education

## THIRD SEMESTER

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#### LSCM 227 DISTRIBUTION MANAGEMENT FOR GLOBAL SUPPLY CHAIN

#### **Objectives:**

- 1. To understand the strategic role of logistics management
- 2. To study the important modes of logistics operations
- 3. To Know supply chain techniques in an international perspective.

#### **Learning Outcomes:**

- 1. Able to Understand the strategic role of Logistics and Supply chain Management in the cost reduction and offering improved service to the customers.
- 2. Combining the traditional physical distribution activity with modern Information Technology to have sustainable competitice advantage to the organization Globaly.

Unit	Description	Hours
1	Need for physical distribution – functions of distribution –marketing forces affecting distribution. The distribution concept – systems perspective. Physical distribution trends.	09
2	Channels of distribution: role of marketing channels – channel functions – channel structure –designing distribution channel – choice of distribution channels – factors affecting. Intermediaries: functions of intermediaries – types of intermediaries – variables in selecting channel members – motivating – training – evaluating channel members – modifying channel arrangements.	09
3	Distribution control & Evaluation: Distribution control – stages of control process – standards & goals– performance report - measurement – monitoring – corrective action. Organization for Distribution: Distribution Organization structure – Private & Public organizations - conflict resolution – rising costs& need for control – complexities of physical distribution.	09
4	Role of Material Handling in Logistics – Material Handling Guide lines – Material Handling Equipment and Systems – Automated Material Handling, Benefits of Logistics Outsourcing – Third Party Logistics – Fourth Party Logistics – Value Added Services.	09
5	Role of Logistics in Distribution Channel – Distribution Channel Structure – Logistic Requirements of Channel Members – Logistics Support to Distribution Channel.	09

#### **Text Books:**

1.Kapoor Satish K., and KansalPurva, 'Basics of Distribution Management: A Logistical Approach', Prentice Hall of India

2. D K Agrawal, 'Distribution and Logistics Management: A Strategic Marketing Approach', Macmillan publishers India

3. Alan Ruston, Phil Crouches, Peter Baker, 'The Handbook of Logistics and Distribution Management kogan page

4. Kapoor Satish K., and KansalPurva, 'Basics of Distribution Management: A Logistical Approach', prentice hall off India 5. D K Agrawal, 'Distribution and Logistics Management: A Strategic Marketing Approach', Macmillan publishers India

#### LSCM 228 APPLIED GIS AND SPATIAL DATA ANALAYTICS

#### **Objectives:**

To understand trends and patterns of trade and also to manage business information effectively. To map manufacturing, clients, processing units, supplier locations, distribution centers, and routing of vehicles.

#### Learning Outcome:

Students understands to manage business information effectively at the end of the course.

Unit	Description	Hours
1	GIS -Definition – Principles – Concepts –Components of GIS, Functions of GIS , Uses of GIS ; Important GIS Vendors – ESRI – ArcGIS, MAPINFO, GEOMEDIA - Open source GIS-QGIS	09
2	Data sources (Open Source for Vector data - glcf, Google Earth, Bing Maps, Bhuvan for Raster data) Data acquisition from data sources – ( Topographic, Cartographic, Remotely sensed, Census, other records and Surveys). Data input -Scanning, Registration, Digitizing, Editing.	09
3	GIS data– Spatial and Attribute data.Data types- spatial, attribute, topology - Spatial data models – Raster and vector – advantages and disadvantages Data conversion. R2V, V2R. shp, dxf etc., Attribute data models – Hierarchical, relational and network.Database Management Systems: types -merits and demerits.	09
4	GIS data analysis – Query(onscreen query, attribute query, spatial query) Classification, reclass, Overlay, Buffer, interpolation Advanced analysis – Network analysis, Terrain analysis, Morphometric analysis, creation of TIN and DEM and multi criteria evaluation (MCE)	09
5	GIS Application: GIS as a Decision Support System, GIS for Business solutions, application of GIS in Land Information System and site suitability analysis, probability analysis, Location and Network analysis Application of mapping in Retail business and international trade. Tracking. Environmental Management, coastal management, Emergency Response System.	09

#### **REFERENCES:**

- 1. Burrough P.A. Principles of Geographic information Systems for Land Resource Assessment Oxford University Press, New York, 1986
- 2. Aronoff S. Geographic Information Systems: A Management Perspective, DDL Publication Ottawa, 1989.
- 3. Chang, & K.-T. (2008). Introduction to geographic information systems. Boston: McGraw-Hill.
- 4. Davis, B. E. (2001). GIS: A visual approach. Albany, NY: Delmar Thomson Learning.
- 5. Fraser Taylor D.R. Geographic information Systems. Pergamon Press, Oxford, 1991.
- 6. Maquire D.J.M.F. Goodchild and D.W. Rhind (eds.). Geographic information Systems: Principles and Application. Taylor & Francis, Washington, 1991.
- 7. Mark S Monmonier. Computer-assisted Cartography. Prentice-Hall, Englewood Cliff, New Jersey, 1982.

Objecti	ves:	
1. ' 2. ' <b>Learni</b> i	To learn Port sturcture, functions and operations. To understand the Airport management for logistics. <b>ng Outcomes:</b>	
	Students gain the knowledge of Port and Airport Manangement for Logistics.	1
Unit	Description	Hours
1	Port Structure and Functions: Definition - Types and Layout of the Ports – Organisational structure-Fundamentalobservations. Main functions and features of ports: Infrastructure and connectivity Administrative functions - Operational functions. Main services: Services and facilitiesfor ships - Administrative formalities - Cargo transfer - Services and facilities forcargo - Additional "added value" service- Ports and their stakeholders like PHO,Immigration, Ship agents, Stevedores, CHA.	09
2	Port Operations: Berths and Terminals - Berth Facilities and Equipment - ship Operation – Preshipment planning, the stowage plan and on-board stowage - cargo positioning and stowage on the terminal - Developments in cargo/container handling and terminal operation - Safety of cargo operations - Cargo security: Measuring and evaluating performance and productivity.	09
3	Port Development: Phases of port development - Growth in word trade - Changes in growth Development in terminal operation. Shipping technology and port: Ship knowledge Ship development and port development - Port time and ship speed - Other technical development affecting port.	09
4	Port Administration Ownership and Management Port ownership structure- Types of port ownership and administration – Organizations concerning ports - Boards governing the ports - Port management development Rise and fall of Ports - information technology in ports. Port ownership in Indian context: Acts governing the Ports in India - Port ownership structure in India. Port reform: Framework for port reform - Evolution of ports in a competitive world Alternative Port Management Structure and Ownership Models.	09
5	Air Transport: Introduction to Air Transport – Air Freight – IATA – Cargo Handling at Goods at Air Port – Information Management of Air Cargo – System and Modules – Distribution of Goods.	09
Categor Referen 1. WOF 2. MAR 3. ALA Publica 4. DE N	CK M.ALDERTON. 2008, Port Management and Operations. Information La	

#### **LSCM 230 SUPPLY CHAIN SOFTWARES**

#### **Objectives:**

To familiarize the students with ERP, ERP Module, SCM and CRM and its application in business related decisions.

#### **Learning Outcomes:**

Students will gain experience in handling ERP, ERP Module, SCM and CRM and its application in business related decisions.

Unit	Description	Hours	
1	Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology - Issues to be consider in planning design and implementation of cross functional integrated ERP systems.	09	
2	Overview of ERP software solutions- Small medium and large enterprise vendor solutions, BPR, Business Engineering and best Business practices - Business process Management. Overview of ERP modules -sales and Marketing, Accounting, Finance, Materials and Production management etc	09	
3	Planning Evaluation and selection of ERP systems-Implementation life cycle – ERP implementation, Methodology and Frame work- Training – Data Migration. People Organization in implementation- Consultants, Vendors and Employees-Case studies.	09	
4	Maintenance of ERP- Organizational and Industrial impact; Success and Failure factors of and ERP Implementation -case studies.	09	
5	Extended ERP systems and ERP bolt –on -CRM, SCM, Business analytics etc-Future trends in ERP systems-web enabled, Wireless technologies so on-Case studies.	09	
Text Boo	Text Books:		
1. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill, 2008.			
2. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2006.			
3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008			
4. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2006.			
5. Summer, ERP, Pearson Education, 2008.			

#### LSCM 231 INTERNATIONAL LOGISTICS AND MANAGEMENT

#### **Objectives:**

- 1. Marketing logistics concept, objective, scope and its elements.
- 2. Interface between international marketing and logistics & supply chain management.
- 3. Role of transport in logistics.

#### Learning Outcomes:

- 1. Assess logistical organizations in terms of functional aggregation and the shift in emphasis from function to process
- 2. Students will be aware of logistics concepts and basic activities.

Internetional Trade Need and Increase Decord Trade in Wends	
International Trade: Need and Importance – Recent Trends in World Trade – Leading players – India's Foreign Trade – Commodity Composition and Destination - Overview of International Logistics- Components, Importance, Objectives; Logistic Subsystem;- Integrated Logistics; - Barrier to Internal Integration – Logistics Documents for International Trade.	09
Marketing and Logistics Customer Focused Marketing; International Marketing: International Marketing Channel: Role of Clearing Agent, Various Modes of Transport, Choice and Issues for Each Mode, Transport Cost Characteristics	09
Basics of Transportation Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; Legal Classifications; International Air Transport; Air Cargo Tariff Structure; Freight: Definition, Rate; Freight Structure and Practice	09
Containerization and Chartering Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR; Chartering: Kinds of Charter, Charter Party, and Arbitration.	09
Inventory Management and Packaging Inventory Management: Introduction, Characteristics, Functionality, Components, Planning; Packaging and Packing: Labels, Functions of Packaging, Designs, Kinds of Packaging; Packing for Transportation and Marking: Types of Boxes, Container, Procedure, Cost, Types of Marking, Features of Marking -Dynamic Component for Continuous Internal Assessment only: Contemporary Developments Related to the Course during the Semester concerned	09
	<ul> <li>Composition and Destination - Overview of International Logistics- Components, Importance, Objectives; Logistic Subsystem;- Integrated Logistics; - Barrier to Internal Integration – Logistics Documents for International Trade.</li> <li>Marketing and Logistics Customer Focused Marketing; International Marketing: International Marketing Channel: Role of Clearing Agent, Various Modes of Transport, Choice and Issues for Each Mode, Transport Cost Characteristics</li> <li>Basics of Transportation Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; Legal Classifications; International Air Transport; Air Cargo Tariff Structure; Freight: Definition, Rate; Freight Structure and Practice</li> <li>Containerization and Chartering Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR; Chartering: Kinds of Charter, Charter Party, and Arbitration.</li> <li>Inventory Management and Packaging Inventory Management: Introduction, Characteristics, Functionality, Components, Planning; Packaging and Packing: Labels, Functions of Packaging, Designs, Kinds of Packaging; Packing for Transportation and Marking: Types of Boxes, Container, Procedure, Cost, Types of Marking, Features of Marking -Dynamic Component for Continuous Internal Assessment only: Contemporary Developments Related to the Course during the</li> </ul>

#### REFERENCES

1. International Marketing by SakOnkvisit& John J. Shaw, Publisher: Prentice Hall of India

2. International Marketing by Gupta and Varshing, Publisher: Sultan Chand and Sons

3. Logistic Management and World Sea Borne Trade by MultiahKrishnaveni, Publisher: Himalaya Publication

4. Logistic and Supply Chain Management by Donald J. Bowerson, Publisher: Prentice Hall of India

## FOURTH SEMESTER

#### LSCM 234 CONTAINERISATION AND MULTIMODAL TRANSPORT

#### **Objectives:**

This subject is tailored to deliver theoretical and practical knowledge in handling methods, transportation modes and various conventions pertaining to carriage of cargo. Containerisation is taught in the perspective of growing importance of transportation in world trade.

#### Learning Outcomes:

To make the student understand the role of logistics infrastructure in transportation and the present logistics infrastructure status in the railways, roadways, waterways and port development.

Unit	Description	Hours
1	Basic concepts of Containerisation :Meaning - Major Container Trades - Container Operators - Container Ships - Terminal- Consideration of Container Terminal Planning - Container Distribution – Containertypes - ISO Container Dimension by types - Non- Containerisable cargo - Features of Containerization - Equipment for non-containerisable cargo.	09
2	Cargos: International Trade Distribution - Stowage: Meaning - Stowage of cargo – FactorConsideration - Types of cargo - Characteristics - Cargo and Container handlingequipment - Types of Packing- Marking of cargo - Dangerous Cargo - IMDG Code –Classes.	09
3	Multi modalism: Multi-modal Trade Routes - Evolution - Basic Intermodal System - Modal InterfaceFactors outline why shipper favour Multi-modalism - Factors in Development Features -Multi-Modalism Strategy – Components.	09
4	Physical multi modal operations: Liners - Tramps - Specialized Vessels - Terms - Road transport vehicle – RoadTransport Weight and Measurement - Rail Transport Vehicle and Equipment - AirTransport - Ports - LCL - FCL - NVOCC - Freight forwarders - Consolidator - ICD CFS- Free Trade Area - SEZ - Factors affecting mode and route choice.	09
5	Conventions relating to multimodal transport: Cargo Liability Convention: International Conventions relating to Bill of Lading (TheHague and Hague/Visby Rules (Appendix 8) - Hamburg Rule - Convention relating toThrough Transport operation by Land, Rail, Air - Conventions relation to DangerousCargo - Carriage of Perishable Goods - International Convention for safe containers1972 (CSC).	09

#### **Text Books:**

1 ALAN E BRANCH & MICHAEL ROBARTS (2014) Branch's Elements of Shipping. 9th Edition, Routledge Publication.

2. CLAUS, HYLDAGER (2013) Logistics and Multi-modal Transport. 2013 Edition, Institute of Charted Shipbrokers.

Reference Books

1. HARIHARAN, K. V. (2002) A Text Book on Containerization and Multimodal Transport. Shroff Publishers and Distributors: New Delhi.

2. HARIHARAN, K. V. (2002) Containerisation, Multimodal Transport and Infrastructure Development in India. 5th edition, Shroff Publishers and Distributors Pvt. Ltd.

#### LSCM 235 SUPPLY CHAIN RISK MODELING AND MANAGEMENT

**Objectives:** As the nature of supply chains evolves with increasing globalization, consolidation and just in time inventories, the amount of risk continues to increase. This course enables the students to get an insight on valuable perspectives on supply chain vulnerabilities. With emphasis on data, models and modeling systems the students can analyze supply chain planning problems.

#### Learning Outcomes:

- 1. Identify and Analyze Business Models, Business Strategies and, corresponding Competitive Advantage.
- 2. Formulate and implement Warehouse Best Practices and Strategies.

Unit	Description	Hours
1	Supply Chain Management - Integrated Planning and Models - Supply Chain Models & modeling Systems – Supply Chain Decision Databases – Data Aggressions, Facility Data, Transportation Network data, Supplier Data – Integrating Supply Chain & Demand Management, Price & location Sensitive Revenue Curves,	09
2	Fundamentals of Optimization Models – Linear programming Modelling – Resource Allocation Model, Infeasible & Unbounded Models, Multiperiod Resource Allocation Model, Network Models., Properties of Linear Programming Models, Dual Linear Programming Model, Parametric 7 Sensitivity Analysis., Spread sheet and Multiple Objective, unified Optimization, Stochastic Programming. Mixed Integer Programming Modelling, Distribution Centre Location Models, Supply Chain Network Optimization Models, Optimization Software.	09
3	Optimization Models for Competitive Analysis, Scenario Planning, Decision trees & Stochastic Programming, Supply Chain Strategies for managing Product Variety. Simulation Models & Systems – Deterministic Simulation, Monte Carlo Simulation, Simulation Software, Simulation Vs Optimization, Inventory Theory Models –Deterministic Models, Probabilistic Models, ABC Classification.	09
4	Risk and Management - Risk in the Supply Chain, Features of Risk, Decisions &Risk, Structure of Decisions, Decisions with uncertainty, Risk, ignorance, Managing Risk Structure of a Supply Chain, Increasing Risk, Trends in Supply Chain Management. Integration of supply Chains, Cost Reduction, Agile logistics, E – Business, Globalization, Outsourcing, Changing practices in Logistics. Approaches to Risk Management.	09
5	Identifying Risks – Types of Risks, Tools for analyzing past events, Operations, Problems with Risk Identification, Measuring Risk, Consequences of Risk, Responding to Risk – Alternative responses, Defining Options, Choosing the best response, Implementation & Activation, A Network view of Risk – Shared Risks, Achieving an Integrated approach, Analyzing & responding to risks.	09
<ul> <li>Text Books:</li> <li>1. Gregory L. Schlegel, Robert J. Trent Supply Chain Risk Management: An Emerging Discipline (Resource Management) Hardcover – Import, 3 Nov 2014.</li> <li>2. Donald Waters – Supply Chain Risk Management, Published by the Chartered Institute of</li> </ul>		

 Donald Waters – Supply Chain Risk Management, Published by the Chartered Institute of Logistics & Transport, U.K

3. Jeremy F.Shapiro, Modelling the Supply Chain, Duxbury.