MDSL 838	Multimodal Transportation	L	T	P	C
Version 1.0		3	0	0	3
Pre-requisites/Exposure	Under Graduate Level Business & Management Knowledge				
Co-requisites	Knowledge of Operations Management, Logistics and Supply Chain Management				

Course Objectives

a) To understand the legal framework governing Multimodal transport in India and International conventions and practices.
b) To understand rules for transportation of dangerous goods.
c) To understand the status of Indian infrastructure for different transport modes, comparison with International situation and commercial and ecological implications.
d) To understand the role of all the parties involved in managing international trade including business partners such as CHA, NVOCC, MTO and other 3 PL and 4 PL companies.
e) To understand the methodology and impact of creating an integrated Multimodal transport system for India.

Course Outcomes

On completion of this course, the students will be able to

CO1. Analyse issues in Multimodal transport in India and take a strategic view of similar transport globally, impacting Indian business.
CO2. Apply analytical techniques to arrive at cost effective solutions to Indian transport needs in the existing legal framework.
CO3. Decide optimal modal options.
CO4. Manage International Logistics & Supply Chain partners and service providers.
CO5. Deploy knowledge of local, regional and international transportation networks to identify and solve incoming and outgoing transport problems.

Catalog Description

The development of Containerisation and seamless multimodal transport has revolutionized commercial transport and International trade. Technology application and economies of scale have brought about unprecedented transport efficiencies. As the developed western nations have become major importers of value added goods and the Asian countries become major production centers necessitating long distance cost effective trade, the applications of multimodal transport have multiplied. Considering that most such applications have international implications various international conventions govern liability regimes and different countries have passed legislation to protect the legal interests of importers and exporters located there. This has also led to the creation of specialized service providers who provide a variety of logistics services in warehousing, transport and intermodal transfer. The transport infrastructure creation also had to keep pace with the growing use of multimodal transport. India's development needs which are directly linked to the growth of international trade and transport will have to be understood from a business perspective. The impact of different transport modes on the environment and rules regarding transport of dangerous goods also need to be understood. This course aims to address all issues relevant to the

development of a multimodal transport system in the country to facilitate the growth of international trade.

Course Content

Module I: 6 lecture hours

Introduction to Multimodal Transportation – Definition of Through transport, Combined transport, Intermodal transport and Multimodal transport. Unitisation / Containerisation and its role and cost benefits. Types of Containers and Container ships.

Unit II: 6 lecture hours

Multimodal Transport Law and Conventions, IMDG Code – Multimodal Transportation of Goods Act, 1993, MMT Amendment Act, 2000. IMDG Code.

Unit III: 9 lecture hours

Transport Modes – Air, Cargo consolidation, Road, Rail, Inland Water, Coastal Shipping and Sea Transport. Connected transport infrastructure and Intermodal transfer. Multimodal Logistics Parks.

Unit IV: 7.5 lecture hours

Logistics management – Roles and responsibilities of 3 PL and 4 PL service providers. AMTOI and MTO. Comparison with requirements in other countries.

Unit V: 7.5 lecture hours

International Multimodal Transport – Warsaw Convention, Montreal Convention, Hamburg Rules, Rotterdam Rules, Hague Visby Rules. Prevalent legal provisions in China, US and Europe.

Text Books

1. K.V Hariharan. (2002). A Text Book on Container & Multimodal Transport Management. Shroffs Publishers & Distributors.

Reference Readings

1. MMT Act, 1993 and MMT Amendment Act, 2000.
2. International Maritime Organisation's Report. 2015 .Review of Maritime Transport.
3. International Maritime Organisation's Report. 2016 .Review of Maritime Transport.
4. McKinsey & Co. Report Transforming the Nation's Logistics Infrastructure.

Modes of Evaluation: Quiz/ Project submission/ presentation/ Class room and case discussion/ Written Examination

Examination Scheme:

Components	Quizzes	Case	Group Project Presentation/	ESE

		Study and class discussion	Submission	
Weightage (%)	**10**	**20**	**20**	**50**

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	COURSE OUTCOMES (COs)	**POs**
CO 1	Analyse issues in Multimodal transport in India and take a strategic view of similar transport globally, impacting Indian business.	PO 1,2, 3,4,7,8,9,10, 11,13, 14
CO 2	Apply analytical techniques to arrive at cost effective solutions to Indian transport needs in the existing legal framework	PO 1,2, 3, 7,8,9,10, 11,14
CO 3	Decide optimal modal options	PO 1,2, 3, 8,9,10, 11, 13,14
CO 4	Manage International Logistics & Supply Chain partners and service providers.	PO 4,5, 8,12,13, 14
CO 5	Deploy knowledge of local, regional and international transportation networks to identify and solve incoming and outgoing transport problems.	PO 1,2,3,4,7,8,9,10

Program Outcome / Course Outcome mapping

Course Outcomes	CO 1	CO 2	CO 3	CO 4	CO5
PO 1	3	3	3	2	3
PO 2	3	3	3	2	3
PO 3	3	3	3	2	3

PO 4	3	1	1	3	3
PO 5	2	2	1	3	1
PO 6	1	1	1	1	1
PO 7	3	3	1	2	2
PO 8	3	3	3	3	3
PSO 9	3	3	3	1	1
PSO 10	3	3	3	2	1
PSO 11	3	3	3	2	2
PSO 12	1	1	1	3	2
PSO 13	3	1	3	3	3
PSO 14	3	3	3	3	3

		Students will be able to develop and evaluate alternate managerial decisions and identify optimal solutions	Students will demonstrate effective application capabilities of their conceptual understanding to the real world business situations	Students will be able to exhibit effective decision making skills, employing analytical and critical thinking ability	Students will demonstrate effective oral and written communication skills in the professional context	Students will able to work effectively in teams and demonstrate team building capabilities	Students will exhibit leadership and networking skills while handling business situations	Students will demonstrate sensitivity towards ethical and moral issues and have ability to address them in the course of business	Students will demonstrate employability traits in line with the changing dynamics of the industry	Students will demonstrate strong conceptual knowledge in the functional area of management as well as LSCM domain	Students will demonstrate effective understanding of relevant functional areas of management and their application in LSCM	Students will demonstrate analytical skills in identification and resolution of business problems pertaining to LSCM & general management	Students will exhibit the ability to integrate functional areas of management with domain perspective for the purpose of planning, implementation & control of LSCM	Students will have global perspective towards business situations in the area of LSCM	Students will exhibit deployable skills pertinent to the LSCM sector
Course Code	Course Title	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 9	PSO 10	PSO 11	PS12	PSO 13	PSO14
MDSL 838	Multimodal Transportation	3	3	3	2	2	**1**	3	3	2	2	3	2	3	3

1 – Weakly mapped
2 – Moderately mapped
3 – Strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: MDSL 838 – Multimodal Transportation

Programme: M.B.A (LSCM) **Semester: ODD-2017-18**

Time: 3 hrs. **Max. Marks: 100**

Instructions:

Attempt all questions from **Section A** (each carrying 2 marks); any **Four Questions** from **Section B** (each carrying 5marks)**. Two from Section C** (each carrying 15 marks)**. Section D is compulsory** (30 marks)

Section A (All Questions are Mandatory)

1	Containerisation of freight ensures ……., …….. and ……. .	**[2]**	**CO 1**
2.	Since India's independence, the share of road transport has increased from …… to …… while that for rail has decreased from ……. to ……. .	**[2]**	**CO 1**
3.	Provision for Air transport was made in the Indian MMT Act in ……. .	**[2]**	**CO 1**
4.	The business model in which a 3PL service provider books retail freight space while booking bulk space with the shipping company is called …… and such a service provider is called ……. .	**[2]**	**CO 1**
5.	The difference between a 3 PL and 4 PL service provider is ……	**[2]**	**CO 1**
6.	The IMDG code has …… categories of dangerous goods.	**[2]**	**CO 1**
7.	Inland waterway transport is considered energy efficient because it has lower …… per ton km. compared to other means of transport .	**[2]**	**CO 1**

8.	Among all modes of surface transport the highest level of environmental pollution is caused by ……..	**[2]**	**CO 1**
9.	A location where transfer between different modes of transport takes place and has storage and other facilities is called ……..	**[2]**	**CO 1**
10.	1. The shipping document which can be endorsed to pass title is called …… .	**[2]**	**CO 1**
	SECTION B (Attempt any **Four Questions) Short Notes**		
1.	Container transport	**[5]**	**CO 2**
2.	MTO	**[5]**	**CO 3**
3.	DFC	**[5]**	**CO 2**
4.	Coastal Shipping	**[5]**	**CO 3**
5.	IWT	**[5]**	**CO 2**
7.	What are the important factors to be considered in deciding to use air as a mode of transport? Discuss various commercial aspects of air cargo consolidation.	**15**	**CO 2,3,5**
8.	Examine development of the concept of a Mini land bridge or reverse land bridge in the context of the North American continent. How can a similar concept be applied on the Indian subcontinent (give an example) and what are the likely benefits?	**15**	**CO2,3,4**
9.	Compare and contrast the development of the Indian and Chinese multimodal transport network, with special emphasis on the role of policy and implementation.	**15**	**CO 2,3**
	SECTION D		
10.	India's GDP growth aspiration is linked directly to the growth of manufacturing and International trade. The logistics infrastructure and policy framework are essential to supporting this growth story. Given the existing inefficiencies in India's logistics sector due to poor connectivity, infrastructure and policy framework: 1. Please formulate a sector wise action plan to eliminate the bottlenecks and facilitate the efficient and timely movement of both domestic and international cargo. Please be specific and justify each suggestion. (20 Marks) 2. Examine the impact of the changes on the environment. (10 Marks)	**[30]**	**CO 5**
