

Name:
Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2018

Course: Logistics & Supply Chain Management

Semester: III

Program: BBA (Finance & Analytical Services)

Time: 03 Hrs.

Max. Marks: 100

Instructions: Answer all parts of a question in one place. Attend all sections.

SECTION A

S. No.		Marks	CO
Q 1	Answer <u>all</u> questions of this section.	20	
(i)	MHES stands for _____. [Fill in the blank.]	1	1
(ii)	NVOCC stands for _____. [Fill in the blank.]	1	5
(iii)	Like manufacturing provides form utility, marketing provides possession utility, logistics provides _____. [Fill in the blank.]	2	4
(iv)	List at least three factors of supply chain that affect the customer satisfaction.	3	1
(v)	What is supply chain mapping? [Answer in 2-3 lines only.]	2	2
(vi)	Procurement cycle connects which two interfaces of the supply chain?	2	2
(vii)	Customer order cycle connects which two interfaces of the supply chain?	2	3
(viii)	Write a mathematical expression for 'supply chain surplus'.	2	3
(ix)	According to Martin Christopher, what are the logistics functions that make up the LOGISTICS MIX ?	2	2
(x)	List the six supply chain drivers.	3	5

SECTION B

Q 2	Answer <u>any four</u> questions in short.	20	
(i)	Write the similarities and dissimilarities in the operations of the following outbound logistics channel members - Wholesalers; Retailers; and Van Dealers.	5	2
(ii)	Write short notes on "packaging materials".	5	3
(iii)	What are the various types of transportation networks?	5	3
(iv)	What is the importance of information handling for a logistics manager of a successful supply chain?	5	4
(v)	What are the principles of material handling	5	2
(vi)	List and explain the functions of warehouses.	5	2

SECTION-C			
Q 3	Answers with description and/or analysis, <u>any three</u> questions	30	
(i)	Explain the factors that determine a particular mode of transportation to be selected.	10	2
(ii)	Write short notes on following technologies practiced in logistics and supply chain management – a) Transportation System Management (TMS) b) Warehouse Management System (WMS)	10	2
(iii)	Explain how the products and the related information and flows across a supply chain. Indicate there in the role of logistics management with reference to the channel structure.	10	3
(iv)	What are types of warehouses? Write short notes on each type.	10	2
(v)	What are the factors considered and techniques used for selecting a warehouse location?	10	3
SECTION-D			
Q 4	Answer the case question (s) with a thorough reading and analysis.	30	
	<p>A Case on Dangerous Goods Handling in Baltic Sea Region – mixed cargo in multimodal transport from Finland to Estonia</p> <p>This case concerns a mixed cargo of 17 tons, of which 6 tons are dangerous goods and the rest are non-dangerous goods. It is a multimodal transport (road-sea-road) from Vantaa (FI) to Tallinn (EE). The con-signor is a manufacturing company and the consignee its subsidiary.</p> <p>The sales office of the manufacturing company, i.e. the consignor, receives an order from its subsidiary through the information system. The consignor in Finland and the consignee in Estonia both use the same information system and therefore, the order (called a transfer order) can be viewed directly through the system. After the order has been confirmed by the sales office, the goods are collected, packed and labelled by the warehouse staff. All the necessary documents are issued and sent to the logistics provider i.e. the carrier (FI). A total of 5 or 6 persons are involved in the case on behalf of the consignor.</p> <p>The carrier contacts the shipping company and books the appropriate (ordinary/thermo transport) shipping space. A subsidiary of the carrier in Tallinn also receives this information through the same information system. The subsidiary then arranges the follow-on transportation from Tallinn. Three persons are involved in this process, both on behalf of the carrier and of the carrier’s subsidiary. The carrier then sends a lorry to collect the goods from the manufacturing site in Vantaa. The consignor loads the trailer while the driver super-vises the work. After receiving the cargo and the documents, the lorry drives approximately 30 km from Vantaa to the Port of Helsinki. The driver leaves the documents and the trailer with the shipping company for loading</p>		1-5

<p>on board ship. The trailer is then transported from Helsinki to Tallinn. The carrier in Tallinn has arranged for a driver to wait for the trailer and the documents after maritime transportation. Because the ship arrives at night, the driver waits until the morning before transporting the goods to the consignee, about 5 km from the port.</p> <p>The consignor always attempts to ship a full lorry load (FTL), i.e. 33 Euro pallets. If the load is less than full (LTL), there is a possibility of receiving an additional load from another business unit or from the carrier's terminal.</p> <p>In this case, the approximate annual net volumes of dangerous goods are as follows: UN No. 1263, 3 III - 1.970 tons, UN No. 1263, 3 II - 270 tons and No. 3082, 9 III - 58 tons. These three classes make up about 99.9% of the total DG volume. There are DG shipments to this particular consignee several times a week.</p> <p>The consignor does not apply a documented process to control the service from the loading point to the delivery, and the IT system does not allow it either. Nor does the case company apply a documented process for the evaluation and performance monitoring of all its supply chain partners. The consignor does evaluate the partners while they are bidding, but no systematic evaluation is done during the contract period. Meetings are arranged with the partners to review objectives and performance, but top management is not involved in these meetings.</p> <p>The carrier is in the same situation concerning the evaluation and monitoring of its partners. Deviations, for example complaints about drivers, are monitored. Because of the flat organization, even top management may attend the review meetings. There exists a considerable amount of competition in the business, which is very cost-sensitive too. Therefore, the carrier co-operates closely with its customers.</p> <p>The consignor did not identify any particular problems or bottlenecks in the transport chain, nor did the carrier. The cases are not very complex and the transport chain functions effectively.</p> <p>QUESTION</p> <p>Explain how the logistics of dangerous goods are managed in terms of</p> <ul style="list-style-type: none"> a) Logistics drivers b) Cross-functional drivers 	<p>15</p> <p>15</p>	
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[Source (Adapted from): Multiple Case Study of Transport Chains of Dangerous Goods in the Baltic Sea Region Lauri (Ojala et al. 2014), <https://www.researchgate.net/publication/228411056>]