Name:
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UNIVERSITY OF PETROLEUM & ENERGY STUDIES

Online End Semester Examination – Dec, 2020

Program: BBA (Logistics Management) **Semester: V**
Subject/Course: Logistics Planning & Strategy **Max. Marks: 100**
Course Code: LSCM 3002 **Duration: 03 Hours**

SECTION A

1. **Each Question will carry 5 Marks**
2. **Instruction: Complete the statement / Select the correct answer(s)**

Q.No		COs
1	The five components of physical distribution are _____, _____, _____, _____ and _____.	CO 1
2	Select all the correct statements; a. The objective of lean logistics strategy is to make the operations efficient. b. The objective of agile logistics strategy is make operations flexible to meet demand. c. For lean logistics strategy performance is measured by the service level. d. For agile logistics strategy performance is measured by the lead time and service level.	CO 2
3	From the given below tasks select all the tasks that are performed during packing and shipping function in any warehouse; a. Checking orders for completeness. b. accumulating distributed picks into orders. c. Preparing shipping documents, including the packing list, address label, and bill of lading d. Weighing shipments to determine shipping charges.	CO 2
4	Select all the correct statements; a. The objective of lean logistics strategy is to make the operations efficient. b. The objective of agile logistics strategy is make operations flexible to meet demand. c. For lean logistics strategy performance is measured by the service level. d. For agile logistics strategy performance is measured by the lead time and service level.	CO 4
5	Write any five important factors in forming supply chain relationships.	CO 3
6	The five inventory costs are _____, _____, _____, _____ and _____.	CO 1

SECTION B

1. **Each Question will carry 10 Marks**
2. **Instruction: Write short / brief notes**

7	What is integrated logistics management? Discuss the activities related to integrated logistics.	CO 1

8	Discuss the lean and agile logistics strategies mentioning the important differences between these two strategies.	CO 3
9	Explain the basic warehouse decisions with regard to cost trade-off.	CO 4
10	A textile firm XYZ considered five alternative locations for a new distribution center in Dehradun City. After many discussions they compiled a list of important factors, their maximum scores, and actual scores for each site. What is the relative importance of each factor? Which site would you recommend? **Factor** / **Maximum Score** / **A** / **B** / **C** / **D** / **E** Infrastructure / 20 / 12 / 16 / 15 / 8 / 13 Accessibility / 15 / 10 / 12 / 11 / 13 / 13 Construction Cost / 5 / 3 / 1 / 4 / 2 / 1 Community attitude / 10 / 6 / 8 / 7 / 4 / 8 Government views / 5 / 2 / 2 / 3 / 4 / 3 Closeness to suppliers / 15 / 10 / 10 / 13 / 13 / 10 Closeness to customers / 25 / 17 / 15 / 20 / 22 / 16 Availability of workforce / 5 / 4 / 1 / 1 / 3 / 2	CO 3
11	Let D be a depot and P, Q, R, S are four customers at different locations. The distance (in Kms) between each of them is as follows; D→P = 8 D→Q = 9 D→R = 13 D→S = 10 P→Q = 4 P→R = 11 P→S = 13 Q→R = 5 Q→S = 8 R→S = 7 Find the shortest route for this travelling salesman problem using saving method.	CO 4
	SECTION C **1. Each Question will carry 20 Marks** **2. Instruction: Write long answer.**	
12	Nike has a central customer service centre (distribution centre) located at Laakdal in Belgium. The centre is 200,000 square metres in size and serves 45,000 customers in EMEA with footwear, apparel and equipment. The centre receives products from supplier factories around the world for distribution to retail clients both before the start of all four seasons each year, and during a given season. Prior to the start of a season, when work is at a peak, the workforce stands at some 2,300 operational staff. Off peak, that drops to 1,350 staff. Deliveries are very time-critical, given the seasonal nature of the business. Retailers demand in-store availability on day one of a new season. The centre is a clear example of a company deciding to centralize receiving, storage and shipment to customers at one location in Europe. The benefits include consolidation of inbound	CO 4

shipments, lower inventory levels and better delivery service (in comparison to fragmented warehouses scattered around Europe). This does not mean, however, that the logistics operations are standardized for all flows of goods and all customers.

Not every shipment is handled in a standard way through a single distribution pipeline:

- About a quarter of the volume of shipments is shipped to customers directly. These are larger shipments, such as full pallets for larger customers – for which there is no need to consolidate with other shipments. As a result, it is cheaper and quicker to make these shipments directly.
- New growth areas that are served from the centre are Russia, Turkey and South Africa. For Russia, the first satellite centre with small inventories was recently opened to enable faster local replenishment of selected products.
- Selected shipments to selected retailers are dealt with by a materials handling operation at the centre. This mainly involves labelling and re-packing operations.
- Some retailers share weekly point of sale data with Nike, enabling it to replenish inventories based upon actual sales.

Questions

a. What are the reasons for a company, such as Nike, with a centralized distribution centre to ship some products directly to customers, not through the distribution centre?
b. What are the reasons to start satellite centres when a company such as Nike has a centralized distribution centre?
c. What are the pros and cons of locating materials handling operations, such as labelling and packing, in a distribution centre, as opposed to in a factory?
d. What are the pros and cons for a company such as Nike to take on these materials handling services as opposed to leaving them to retail customers?

OR

Find the initial basic feasible solution for the following transportation problem using least cost (matrix minima) method and Vogel's Approximation Method (VAM) both.

		Destinations				Supply
		D1	D2	D3	D4	
Sources	O1	3	1	7	4	300
	O2	2	6	5	9	400
	O3	8	3	3	2	500
	Demand:	250	350	400	200	

ANSWERS