

PGDM / PGDM (IB), 2013-15
Logistics & Warehousing Management
DM-543/IB-513

Trimester – V, End-Term Examination: December 2014

Time allowed: 2 hrs 30 min

Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. In case of rough work please use answer sheet.

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5 (Short Questions)	5 Marks each	3*5 = 15
B	2 out of 3 (Long Questions)	10 Marks each	2*10 = 20
C	Compulsory Case Study	15 Marks	15
		Total Marks	50

Section A

Q1. Name the various stakeholders in logistics and warehousing with whom NSO(New store operation) team has to interface.

Q2. Explain 3PL and 4PL. Give two examples for each. Explain their differences.

Q3. Show through graph the following relationships and give 2 examples for each: (a) Distance and cost (b) weight and transportation cost/kg (c) density and transportation cost/kg.

Q4. List various steps to be undertaken to improve the pick efficiency in the warehouse.

Q5. Explain the variation of logistics cost with the total number of warehouses. Which is a better strategy: one big warehouse at low rental or small distributed warehouses on higher rentals?

Section B

Q1. A company which manufactures biscuit in India has to transport its finished goods to various branches. It has got manufacturing plants in all regions of India having manufacturing capacity in decreasing order as N, E, W, S. What transportation mode should it use and why. Various important factors are: speed, availability, dependability, capability, frequency. State reasonable assumptions if any.

Q2. What unique logistics and warehousing characteristics would be there in an e-retailer like Flipkart? What are they doing to address the bad customer experience during the sale period last month?

Q3. Take the example of Gopaljee Dairy plant and field visit. Explain the operations and detail out the challenges being faced.

Section C

Q1. A new warehouse of approximately 2 lakh sq. ft has to be set up in NCR region to cater to 150 stores spread over Delhi, Ghaziabad. You have been hired as a consultant to give your suggestion about the possible location of the warehouse. The stores are spread over NCR. A Google map gives the traffic condition at 9 am of any day.

Number of stores	Location	No entry restrictions	Average distance from warehouse at Outer Gurgaon(km)	Transportation cost for 6 tonne vehicle Rs/km	Transportation cost for 1 tonne vehicle Rs/km	Addition al cost Rs/km for no entry wait	Total load to stores in tonnes/day
48	East Delhi	6 am to 9pm	60	20	5	7	8
40	West Delhi	6 am to 9pm	40	20	5	7	7
30	North Delhi	6 am to 9pm	45	20	5	7	6
10	South Delhi	6 am to 9pm	40	20	5	7	5
11	Gurgaon	No restriction	20	20	5	7	10
10	Faridabad	No restriction	45	20	5	7	8
1	Greater Noida	No restriction	70	20	5	7	2

Number of stores	Location	No entry restrictions	Average distance from warehouse at Sonipat(km)	Transportation cost for 6 tonne vehicle Rs/km	Transportation cost for 1 tonne vehicle Rs/km	Additional cost Rs/km for no entry wait	Total load to stores in tonnes/day
48	East Delhi	6 am to 9pm	40	20	5	7	8
40	West Delhi	6 am to 9pm	45	20	5	7	7
30	North Delhi	6 am to 9pm	40	20	5	7	6
10	South Delhi	6 am to 9pm	50	20	5	7	5
11	Gurgaon	No restriction	50	20	5	7	10
10	Faridabad	No restriction	75	20	5	7	8
1	Greater Noida	No restriction	70	20	5	7	2

Number of stores	Location	No entry restrictions	Average distance from warehouse at Greater Noida(km)	Transportation cost for 6 tonne vehicle Rs/km	Transportation cost for 1 tonne vehicle Rs/km	Additional cost Rs/km for no entry wait	Total load to stores in tonnes/day
48	East Delhi	6 am to 9pm	45	20	5	7	8
40	West Delhi	6 am to 9pm	50	20	5	7	7
30	North Delhi	6 am to 9pm	40	20	5	7	6
10	South Delhi	6 am to 9pm	35	20	5	7	5
11	Gurgaon	No restriction	55	20	5	7	10
10	Faridabad	No restriction	60	20	5	7	8
1	Greater Noida	No restriction	70	20	5	7	2

Three tables above give the distance from various warehouses. Additionally the rental in Rs/sq.ft for various warehouses is as given: Outer Gurgaon: Rs 20/sq.ft, Sonipat: Rs 15/sq.ft, Greater Noida: Rs 14/sq.ft. Which warehouse would you select and why? State any assumptions made.
