

Nov 2017

TyBMS / 125

Q. P. Code: 19384

[Time: 2:30 Hours]

[Marks: 75]

Please check whether you have got the right question paper.

Note:

- 1. All questions carry equal marks.
- 2. Figures to the right indicate marks.
- 3. Use of simple calculator is allowed.

Q1. Answer Any Two of the following

(15)

- a. What do you mean by Bull-whip effect in SCM? What are the causes of the Bull-whip effect?
- b. Discuss 7 R's of Customer Service with a suitable example.
- c. From the following data calculate a 3 period and 5 period moving average, also forecast demand for the 11<sup>th</sup> period.

Period	1	2	3	4	5	6	7	8	9	10	11
Demand in Units	120	125	130	135	140	145	150	165	180	200	?

Q2. Answer Any Two of the following

(15)

- a. What are Product related and Market related factors influencing transportation costs and pricing?
- b. Discuss the objectives and principles of Material Handling System.
- c. Define Packaging. Explain the different types of Packaging.

Q3. Answer Any Two of the following

(15)

- a. Explain the concept of Re-Order Level (ROL). Daily consumption of a raw material in the production process is 400 units. Lead time for delivery is 5 Days. Company's policy is to keep a safety stock equal to two day's daily consumption to guard against stock out. Calculate Re-Order Level.
- b. Explain the principles of logistics costing. Explain the concept of mission based costing.
- c. What are the different transportation network design options available in Logistics Network Analysis?

Q4. Answer Any Two of the following

(15)

- a. What is logistical infrastructure? What are the projected benefits from GOLDEN QUADRILATERAL Project?
- b. Define 3 PL. What are the types of 3 PL service Providers?
- c. Discuss various global logistics trends.

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Q5. Read the following case study and answer the following questions given below (15)

M/s Chemtech manufactures various types of industrial chemicals at the outskirts of Chennai. It has distributors located at various places across the country. M/s Chemtech also sells chemicals directly from its factory as well.

M/s Potash Ltd is a major supplier of raw materials to M/s Chemtech. But M/s Chemtech is facing problems with this supplier because of (i) late deliveries, (ii) delivery of wrong orders, (iii) missing deliveries giving reasons that they had not received the order. Historically, M/s Chemtech has dealt with its supply problems by simply changing its suppliers. The company now is contemplating on further additional changes.

M/s Potash, as stated before, is one of the main suppliers of M/s Chemtech. M/s Potash holds a large inventory to meet the demands of its customers. But some of the vital items of inventory have to be imported. The lead time for this is around 3 months.

Now, when M/s Chemtech places orders for these vital items of inventory, M/s Potash is not able to meet the order immediately due to stock outs. Therefore, M/s Chemtech feels that M/s Potash lets it down due to which the production schedules of M/s Chemtech is totally disturbed.

Due to the repeated frictional relationship with M/s Potash, the management of M/s Potash is wondering whether it is worth keeping customer relationship with M/s Chemtech. Of course, M/s Chemtech is one of its major buyers, but the constant threats by M/s Chemtech has put M/s Potash on the defensive. That is, they fear that if they suddenly lose the business with M/s Chemtech, then this might seriously affect the operations of M/s Potash. The top management of M/s Potash is seriously contemplating to change its customer base, namely, it wants to now focus on building a customer-base founded on long-term relationship and rely less on business with M/s Chemtech.

The present scenario between M/s Chemtech and M/s Potash is like this:

At the beginning of each month, the customers of M/s Chemtech forecast their requirements for the next month. Throughout the month, these customers keep telephoning their orders to M/s Chemtech's marketing department. The representatives of the marketing department relay the requirements of the customers to the logistics department of M/s Chemtech. The logistics department of M/s Chemtech transmits the orders to the purchase department and the purchase department, in turn, then orders the required stocks from M/s Potash.

Several times, the customers of M/s Chemtech place expedited orders. Such orders are generally not met by M/s Potash since the stock with them has already been earmarked for other clients. The customers of M/s Chemtech are dissatisfied for non-delivery of stocks on schedule.

#### Questions

- 1) Examine what are M/s Chemtech's logistical problems (5)
- 2) Discuss how M/s Chemtech can improve its logistical operations (5)
- 3) What, according to you, should M/s Potash expect from its customers? (5)

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