

April - 2018

J. Y. Bms. V

Q. P. Code: 31262

Time: 2 1/2 Hours

Marks: 75

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 are the objectives of SCM?. Distinguish between Logistics and SCM.
- b. Discuss the dimensions and measures of Customer Service
- c. From the following data, calculate a 3 period weighted moving average with weights as 3,2,1 respectively to forecast demand for the 11th period.

Period	1	2	3	4	5	6	7	8	9	10	11
Demand in Units	100	115	125	130	140	150	165	175	190	195	?
Weightage for 3 period moving average								1	2	3	---

Q2. Answer Any Two of the following (15)

- a. Write note on Piggy Back, Birdy Back, Fishy Back and Land Bridge.
- b. What are the principles in warehouse layout design?
- c. Discuss various type of Materials Handling Equipments.

Q3. Answer Any Two of the following (15)

- a. Discuss the factors on which re-order level depends and solve the following. Daily consumption of raw material in the production process is 210 units. Lead time for delivery is 5 days. Company's policy is to keep safety stock equal to three days daily consumption. Calculate re-order level.
- b. Discuss Activity Based Costing (ABC) method of Logistics.
- c. Discuss RORO and LASH.

Q4. Answer Any Two of the following (15)

- a. What is logistics Park? What are basic requirements of a logistics Park?
- b. State objectives, advantages and disadvantages of a Global Supply Chain.
- c. Discuss the concept of Bar Coding, RFID and EDI in Logistics and SCM.

Q5. Read the following case study and answer the following questions given below :

Over last three decades, Western Maharashtra has had successful sugar co-operative movement. This substantially increased the income of rural populace.

They now had large disposable income. But they still had very limited education and business knowledge. Majority invested in milch cattles like cows and buffaloes. Even when they were able to produce large quantities of milk, it never turned into a proposition similar to sugar due to non-availability of milk processing facilities.

Therefore, Shriram Co-operative Sugar Mill (SCSM) initiated action to set up milk processing facility. They appointed an expert from Denmark to consult them to set up a Dairy, who carried out total feasibility study and gave recommendations.

Accordingly, they set up a very modern Dairy three years ago to process 700,000 liters Milk per day. But today SCSM was not able to utilize Dairy's capacity and has started making huge losses. Management has now set up a task force to study the viability of the project and reasons for its failure. The task force has made following key observations:

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1. SCSM's Dairy is dependent on more than 35000 farmers to supply milk to them, who are spread in radius of 50 Km from the Dairy. The milk is brought to Dairy by Cycle, bike, Auto etc.
2. Farmers milk their cattle two times in a day. To economize on time and cost, they bring milk once in two days to the Dairy, but only after storing the milk for a day or two at their own end. Hence, the quality of milk is getting affected and results into a significant percentage of supply going bad after receipt.
3. The milk is processed at the dairy, and is packed in plastic bags of 500ml and 1000ml. The packed milk is then supplied to local markets like Pune and Mumbai. Around 15% of bags are found to be damaged and around 8% of milk is wasted during transportation.
4. Even though the quality of milk is good but fair number of institutional customers, who are buying 500 to 5000 liters of milk per day in the same packing from SCSM are not happy because of erratic supply and damage reached in transit. A few have already switched their loyalty.

The situation is rather discouraging. The board of Management is of the opinion that dairy be closed down to minimize the losses. However, the Chairman is confident that it still can be turned around. He thus wants to appoint you as logistics consultant to tackle the areas of ailment.

Therefore you are required to address following areas.

- a) Proper procurement policy to ensure full capacity utilization. (5)
- b) Outbound logistics to reduce market recalls and rejections. Any multi location facility to create logistics lag. (5)
- c) Specific packaging improvement/ differentiation to reduce cost as well as wastage in transit. (5)
