

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA - SEMESTER-IV • EXAMINATION – SUMMER 2013

Subject Code: 2840005

Date: 16-05-2013

Subject Name: Supply Chain Management

Time: 14:30pm – 17:30pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Consider the purchase of a can of soda at a convenience store. Describe the various stages in the supply chain and different flows involved. **07**
- (b) Identify one product each in the functional and the innovative categories. Identify similarities and differences in the way supply chains for these products are managed by their respective firms. **07**
- Q.2** (a) A manufacturer of steel strips requires 10000 tons of iron ore every month. The management knows that they spent Rs. 1020 every time they order. Store department confirms that iron ore holding cost is 10% of its price. Assume that the price of iron ore per ton is Rs. 1150. Calculate **07**
1. Economic order quantity
 2. No. of orders per year
 3. Reorder point in terms of No. of tones, if lead time is 2 weeks (Assume 52 weeks in a year)
- (b) Explain “Impact of Service Level on Revenue Costs and Profits”. **07**
- OR**
- (b) Explain Quantitative V/s Qualitative Methods of demand forecasting with examples. **07**
- Q.3** (a) Compare and contrast issues involved in vehicle routing in the following applications: **07**
- a) Employee pick-up for a software service company.
 - b) Milk collection for a dairy cooperative.
- (b) Reliance is trying design a network for its retail operations from the scratch. Suggest a suitable approach. **07**
- OR**
- Q.3** (a) Define uncertainties that are particularly relevant when designing global supply chains? **07**
- (b) How do the location and size of warehouses affects the performance of a firm like Amazon.com? What factors should Amazon.com should take into consideration when making the decision? **07**
- Q.4** (a) Write a note on ERP **07**
- (b) Write a note on Cross Docking **07**
- OR**
- Q.4** (a) Write a note on Bullwhip Effect **07**
- (b) Write a note on ECR Initiatives in India **07**
- Q.5** (a) What are the ways in which firm can move from an MTS model to CTO Model? **07**
- (b) Indian IT firms have been hiring engineering students who are not **07**

trained software specialists. IT firms spend enormous resources on training these young graduates. Should they outsource software training to colleges from which these students are hired?

OR

- Q.5** (a) A trucking company owns 50 oil tankers. A large oil company is willing to book the entire fleet in advance at Rs 15,000/- per tanker per month. The owner of the trucking company has found that on the spot market customers are willing to pay a price of Rs 25000/- per tanker per month. Demand however is uncertain in the spot market. From the past data the owner has estimated that demand in the spot markets is likely to follow normal distribution with a mean of 25 tankers and a standard deviation of 5. How many tankers should be reserved for the spot market? Value for $K = -0.25$. **07**
- (b) Agile firms and efficient firms are likely to differ in the way they manage and measure supply chain performances. Identify a few key areas of differences in these two firms. **07**
