

**INDIAN STATISTICAL INSTITUTE
SQC & OR Unit, Hyderabad**

**MS in Quality Management Science: 2014-16
III SEMESTER: END-TERM EXAMINATION**

Subject: Supply Chain Management

Date: 28 Oct 2015

Duration: 3 hours

Max. Marks: 100

Part – A (50 Marks)

Answer any five questions. Each question carries 10 marks. Illustrate with diagrams wherever required.

1. Using a schematic, explain the cyclic view of the supply chain processes.
2. Explain the role of facilities as a key driver of supply chain performance.
3. Explain the various design options for transportation networks in a supply chain.
4. Explain the role of: a) Cycle inventory b) Safety inventory in a supply chain.
5. Describe the three macro processes in a supply chain.
6. Explain the key processes in customer relationship management.
7. Explain the three elements of strategic cost management.

Part-B (50 marks)

Read the case and answer the following questions. Each question carries 10 marks. Illustrate with diagrams wherever required.

1. What is the impact of railway gauge conversion (from metre gauge to broad gauge) on Dalmia cement's distribution operations?
2. What should be the optimal transport mode mix for Dalmia cement?
3. Suggest ways in which Dalmia can get assured supply of trucks throughout the year.
4. Should Dalmia change its transport policy and manage a fleet of trucks on its own for its distribution function. If yes, why? If no, why?
5. Why was Dalmia cement exploring the option of movement from pack to stock to pack to order strategy? What conflicts or barriers internal to Dalmia would the pack to order strategy create? How should Dalmia cement handle these issues?

-----*All the Best*-----