

Roll No.....

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) – 201306

## POST GRADUATE DIPLOMA IN MANAGEMENT (2019 -21) MID TERM EXAMINATIONS (TERM - IV) Academic Session- 2020-21

Subject Name: Supply Chain Management	Time: 01.30 Hrs.
Sub. Code: PG032	Max Marks: 20

## Note:

**1.** Writing anything except Roll Number on question paper will be deemed as an act of indulging in unfair means and action shall be taken as per rules.

2. All questions are compulsory in Section A, B & C. Section A carries 1 Case Study of 8 marks. Section B carries 3 questions of 2 marks each and Section C carries 2 questions of 3 marks each.

## **SECTION - A**

#### 04+04 = 08 Marks

## Q1: Case Study

One of the world's largest manufacturers of computer chips, Intel needs little introduction. However, the company needed to reduce supply chain expenditure significantly after bringing its low-cost "Atom" chip to market. Supply chain costs of around \$5.50 per chip were bearable for units selling for \$100, but the price of the new chip was a fraction of that, at about \$20.

**The Supply Chain Cost Reduction Challenge:** Somehow, Intel had to reduce the supply chain costs for the Atom chip, but had only one area of leverage—inventory. The chip had to work, so Intel could make no service trade-offs. With each Atom product being a single component, there was also no way to reduce duty payments. Intel had already whittled packaging down to a minimum, and with a high value-to-weight ratio, the chips' distribution costs could not be pared down any further.

The only option was to try to reduce levels of inventory, which, up to that point, had been kept very high to support a nine-week order cycle. The only way Intel could find to make supply chain cost reductions was to bring this cycle time down and therefore reduce inventory.

**The Path to Cost Reduction:** Intel decided to try what was considered an unlikely supply chain strategy for the semiconductor industry: *make to order*. The company began with a pilot operation using a manufacturer in Malaysia. Through a process of iteration, they gradually sought out and eliminated supply chain inefficiencies to reduce order cycle time incrementally. Further improvement initiatives included:

- 1. Cutting the chip assembly test window from a five-day schedule, to a bi-weekly, 2-day-long process
- 2. Introducing a formal S&OP planning process
- 3. Moving to a vendor-managed inventory model wherever it was possible to do so

**Supply Chain Cost Management Results:** Through its incremental approach to cycle time improvement, Intel eventually drove the order cycle time for the Atom chip down from nine weeks to just two. As a result, the company achieved a supply chain cost reduction of more than \$4 per unit for the \$20 Atom chip—a far more palatable rate than the original figure of \$5.50.

- a) Is it good or bad to have Inventories? Explain in the context of Intel.
- b) "Make to Order" Strategy is not very common in Semi-Conductor Business. Then why Intel made that shift?



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## **SECTION - B**

02×03 = 06 Marks

**Q2:** Explain Customer Service and Cost Tradeoff for a PIZZA Company.

Q3: What are the different flows in Supply Chain Management?

**Q4**: "TISCO chose Jamshedpur as location for its Manufacturing Plant". Explain this situation as a competitive strategy for Facility location

# **SECTION - C**

03×02 = 06 Marks

**Q5:** Explain EOQ model of Inventory Management along with the derivation of Formula. **Q6:** How Material Resource Planning (MRP) is different from Enterprise Resource Planning (ERP)?