

Roll No.

Total No. of Pages : 03

Total No. of Questions : 10

MBA / MBA (IB/FinTech) (Sem.-2)

PRODUCTION AND OPERATIONS MANAGEMENT

Subject Code : MBA-205-18

M.Code : 76157

Date of Examination : 26-05-2025

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** contains **EIGHT** questions carrying **TWO** marks each and students has to attempt **ALL** questions.
2. **SECTION-B** consists of **FOUR** Subsections : **Units-I, II, III & IV**. Each Subsection contains **TWO** questions each carrying **EIGHT** marks each and student has to attempt any **ONE** question from each Subsection.
3. **SECTION-C** is **COMPULSORY** and consists of **ONE** Case Study carrying **TWELVE** marks.

SECTION - A

1. **Write briefly :**
 - a) Characteristics of Product Design.
 - b) Scope of Operations Management.
 - c) Objectives of Layout Planning.
 - d) Define works study.
 - e) Explain Kanban System.
 - f) Juran's Quality Trilogy
 - g) Acceptance Sampling
 - h) Virtual Factory Concept

SECTION - B

UNIT - I

2. Explain the factors to be considered in Location planning. Discuss any two techniques of Location Analysis.
3. Discuss the Product Design and Development process in detail with diagram.

UNIT - II

4. Discuss the concept and significance of facility layout. Elaborate different types of layout with suitable diagram and examples.
5. Explain the concept and functions of Production planning and control elaborately.

UNIT - III

6. What is TQM and its components? Discuss its implementation in an organization.
7. What is the significance of Control charts? Explain different types of Control charts.

UNIT - IV

8. **Elaborate the following models of inventory control in detail :**
 - a) EOQ model
 - b) ABC Analysis
9. Explain the concept of JIT system and its implementation in detail.

SECTION - C

10. Case Study :

Dalmia Cements Planning to Double Capacity

by G Naga Shridhar

Dalmia Cements Bharat Ltd (DCBL) will be doubling its production capacity to 12 million tones by the end of 2009 fiscal year commissioning three Greenfield projects."The work in three projects coming up at Kadapa (Andhra Pradesh), Ariyalur (Tamil Nadu) and Cuttack (Orissa) is progressing well. These projects will help increase our capacity from current 5.5 million tones to 12 million tones,"Mr Puneet Dalmia, Director.

Dalmia Cements Bharat Ltd told Business Line. The Kadapa plant (2.25 million tones) and Cuttack plant (2.25 million tones) would commence production in September 2008 while the Ariyalur project would go on line by March 2009. The company has invested over \$500 million in these projects, he said.

In view of the huge demand in the domestic market, the additional capacity would be utilised to cater to markets in Tamil Nadu, Karnataka, Kerala, Orissa, Western Region and Jharkhand. "We are already supplying to these markets and the additional capacity will also go there," Mr Dalmia said.

Though DCBL, which ranks seventh among the top cement companies in India, is exporting oil well cement (used in drilling process) to the Gulf region, the focus is only on domestic markets, he added.

Domestic Capacity

On the demand supply gap in the market, Mr Dalmia said building domestic capacity is the only solution. "Though there is a talk on cement imports from Pakistan, I feel cement is a local business in the long term and the capacity should be built within the country. I am bullish on a long term view. Next 10 years, the market would be at ease," he said. The capex pipeline in the country would facilitate additional capacity generation of 100 million tones in next two to four years and the surplus capacity would be visible in next 18 months, he added. The Tiruchy- based company is expecting to clock a turnover of 1,200 crore this year. "By the end of 2009-10, we will be crossing 2,000 crore," Mr Dalmia said.

Source: the hindu businessline.com

- a) Why did Dalmia company decided to expand its capacity?
- b) Why did it not prefer to import cement from Pakistan?
- c) Do you think this decision of additional capacity is right for this company?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.