Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐ **Total No. of Pages : 03**

Total No. of Questions : 10

MBA (IB) (Sem.–2)

PRODUCTION AND OPERATIONS MANAGEMENT

Subject Code : MBA-205-18

M.Code : 76157

Date of Examination : 10-01-2025

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 consist of ONE Case Study carrying TWELVE marks.**

SECTION-A

1. **Explain the following :**

   a) Contribution of Deming and Crossby.

   b) Mass production system *vs* Job production system.

   c) Define Capacity planning decision.

   d) What is Methods Study?

   e) Mention any 4 factors considered in Location analysis.

   f) Define Lead time and Reorder Level.

   g) What is Quality?

   h) Define the concept of TQM.

SECTION-B

UNIT-I

2. **Discuss the techniques of :**

   a) Quality Function Deployment /House of Quality with diagram.

   b) Stage Gate Approach.

3. What is Operations management? Explain its importance, functions and transformation model in detail.

UNIT-II

4. Facility Layout ensures smooth efficient production and less wastages. Do you agree? Explain various layouts with diagram and examples.

5. Explain the different factors affecting capacity planning decision. Discuss the process of capacity planning in detail.

UNIT-III

6. Discuss the concept and importance of Quality Management. Explain different Control charts used in ensuring quality.

7. Explain Six Sigma approach/methodology of Quality Management in detail.

UNIT-IV

8. Discuss various factors affecting Inventory control policy. Discuss any two techniques of Inventory Control.

9. Describe Lean Management systems with focus on JIT system and its components.

SECTION-C

10. **Case Study :**

P&G Planning to set up 3rd Facility in India — Following the handsome volume gains in the shampoo segment over the last few months due to price cuts, Procter & Gamble has begun thinking in terms of setting up its third manufacturing facility in the country. At present, the company manufactures Ariel and Tide detergents at Mandideep in Madhya Pradesh and Vicks range of products at Kundaim in Goa. However, it imports all of its shampoo brands - Head & Shoulders, Pantene and Rejoice - from overseas markets. On whether the company was scouting for sites to set up manufacturing facility for shampoos and other products, perhaps in Himachal Pradesh, a company spokesperson said, "P&G is examining this interesting opportunity. At this stage a decision has not been made, but the Himachal Pradesh plant is being evaluated at the moment." She confirmed that the company is importing its shampoo brands at present but did not specify whether the new facility being envisaged would manufacture shampoos. Analysts tracking the sector said the company, which imports shampoos from Thailand and other Asian countries, has decided to invest in a new manufacturing base because of the recent volume gains in shampoos and detergents despite sluggish value growth. However, the investment earmarked for this new facility could not be ascertained, said Pranav Securities' CEO, Mr Rajesh Jain, *"Most shampoo marketers operate through third party contract manufacturing since it keeps costs low and also provides logistical advantages. But these advantages of thirdparty manufacturing are now decreasing, since places such as Himachal Pradesh offer backward area benefits as well as income tax rebates".* Another FMCG analyst felt that its own manufacturing facility will give the company further cost advantages in the segment vis-à-vis competition, particularly Hindustan Lever Ltd. (HLL) "Besides with value added tax and MRP-based excise duties coming in next year, production outsourcing has become less attractive.

“P&G's move shows it has set its sights on a long innings in India," he added. Yet another analyst said the willingness of FMCG companies to invest in building capacities showed that they were banking on the current downturn in the market to end soon. "Besides, why would companies invest unless they were sure that growth will continue even if it comes at lower price points," he wondered. Procter & Gamble Hygiene and Health Care Ltd. (PGHH) - the listed arm of P&G - posted 30 per cent sales growth at 577.24 crore for the 12 months ended June 2004, with 35 per cent higher net profit at 92.17 crore. While PGHH deals with Vicks and Whisper product portfolios, its subsidiary P&G Home Products caters to shampoo and detergent brands in India

Answer the following questions :

a) Why was P&G earlier importing shampoos? Why are they now considering the option of opening a new manufacturing facility for shampoos rather than importing?

b) What factors are considered by them in selecting this facility location?

c) If you were the manager of this company what will be your decision, will you still import or manufacture shampoos yourself?

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.