

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

POST GRADUATE DIPLOMA IN MANAGEMENT (2024-25)
MID TERM EXAMINATION (TERM -II)

Subject Name: **Production and Operations Management**

Time: **01.00 hrs**

Sub. Code: **PG24**

Max Marks: **20**

Note: Section below carries 5 questions of 4 marks each and each of these questions is Compulsory:

Use-Case Section (All Questions are Compulsory)

Read the following use-case carefully:

FutureTech Manufacturing, a prominent leader in the Indian electronics sector, is known for producing advanced consumer gadgets. As competition intensifies and customer demands shift toward personalized products, FutureTech is undergoing a strategic transformation. The company is adopting modern practices in production and operations management (POM) to maintain its market position and enhance its production efficiency.

FutureTech plans to deploy an integrated platform called “ProdSync,” which centralizes all Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and operational dashboards. This platform will facilitate real-time decision-making, data-driven insights, and seamless communication across departments. The organization is also transitioning from traditional mass production to a hybrid system that incorporates batch production, job shop strategies, and mass customization.

To support these changes, FutureTech is employing concurrent engineering, reverse engineering, and modular product development. Additionally, it is embracing value engineering and target costing to optimize costs while delivering high-quality products.

Answer the following questions based on the above scenario: (4 marks each * 5= 20Marks)

- Q1.** Define the scope and characteristics of the ProdSync platform. What are the expected benefits for FutureTech’s production operations and stakeholder management? **(CO1, L2)**
- Q2.** Identify the type of production system FutureTech is adopting by transitioning from mass production to a combination of batch production, job shop, and mass customization. Justify your answer. **(CO2, L3)**
- Q3.** Highlight the product life cycle and technology life cycle associated with FutureTech’s new range of consumer gadgets. How should the company adapt its production strategies at each stage of these cycles? **(CO1, L1)**
- Q4.** Evaluate the product development process at FutureTech with a focus on the funnel and modular approaches. What potential challenges could arise and how can these be mitigated? **(CO2, L2)**
- Q5.** Compare the use of concurrent engineering and reverse engineering in FutureTech’s product development. How do these approaches contribute to faster product innovation and market adaptability? **(CO2, L3)**