

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

POST GRADUATE DIPLOMA IN MANAGEMENT (2025-27)
MID TERM EXAMINATION (TERM -II)

Subject Name: **Production and Operation Management**Time: **01.00 hrs**Sub. Code: **PG204**Max Marks: **20****Note: All questions are compulsory.****Read the following case and answer the following questions:****10×2 = 20 Marks****Case: 1. Bharat Bakers – Optimizing Production Processes**

Bharat Bakers is a well-known bakery chain in India, famous for its wide range of breads, cakes, and pastries. Over the years, the company has expanded to 50 outlets across multiple cities. With rising customer demand, Bharat Bakers faced challenges in managing production efficiently while maintaining consistent quality. The management realized that understanding and optimizing their production processes was essential to reduce costs, improve speed, and enhance customer satisfaction.

The company analyzed its operations and found that different products required different types of processes. Bread, produced in large quantities daily, followed a high-volume, low-variety flow process, where standardized recipes and automated ovens ensured consistent quality and rapid output. Cakes, on the other hand, were medium-volume, medium-variety products, often customized with different flavors, toppings, and designs. These required a batch process, where each batch of cakes was processed separately to accommodate variations. Specialty pastries, such as designer desserts for celebrations, were low-volume, high-variety products, made on a job-shop basis with skilled bakers handling each order individually.

The operations team also studied process characteristics such as flow, volume, and variety. They realized that products with continuous flow, like sliced bread, needed standardized assembly lines and minimal human intervention, while batch and job-shop processes required more flexible setups and skilled labour. This analysis helped them decide on the appropriate operations systems for each product type: flow-shop systems for bread, batch production systems for cakes, and job-shop systems for specialty pastries.

To improve efficiency, Bharat Bakers redesigned their processes. For high-volume bread, they optimized oven layouts, automated dough mixing, and implemented conveyor systems to reduce bottlenecks. For cakes, they standardized certain ingredients while keeping customizations flexible, balancing efficiency with variety. For specialty pastries, they trained bakers on multiple skills to handle custom orders efficiently. By aligning process design with product characteristics and operations systems, Bharat Bakers achieved faster production, reduced waste, and higher customer satisfaction without compromising quality.

Question:

Q. 1. Identify the type of process and operations system used for bread, cakes, and specialty pastries at Bharat Bakers. Explain your reasoning based on process characteristics such as flow, volume, and variety. **CO1**

Q. 2: Suggest two process design improvements that Bharat Bakers could implement to further enhance efficiency and reduce costs for high-volume products. **CO2**