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**BACHELOR OF BUSINESS ADMINISTRATION (B.B.A.)**

**EXAMINATION : DECEMBER - 2023**

**SEMESTER - IV**

**Sub. : Productions and Operations Management (BBA15- 413)**

**Date : 22/12//2023**

**Total Marks : 60**

**Time: 2.00pm to 4.30pm**

**Instructions:**

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.

**Q. 1. Choose the most appropriate option. (05)**

1. .... is also recognized by many as flow line production system.
 

a) Mass Production	b) Batch Production
c) Unit Manufacture of Projects	d) Job Shops
2. .... focuses on specialization of functional homogeneity on various components of the manufacturing system.
 

a) Line or Product Layout	b) Functional and Process Layout
c) Group or Cellular Layout	d) Job shop Layout
3. Activities which can be accomplished concurrently are known as .....
 

a) predecessor activity	b) Successor activity
c) concurrent activities	d) None of the above
4. Which maintenance refers to maintenance performed prior to any breakdown?
 

a) Breakdown	b) Preventive
c) Risk-based	d) Condition-based
5. In ..... Sample is drawn in two stages. The second sample is drawn only when a clear cut decision cannot be drawn from the first sample.
 

a) Single Sampling Plan	b) Double Sampling Plan
c) Sequential Sampling Plan	d) A or B

**Q. 2. State True / False (05)**

1. Hidden cost includes cost of inventory carrying, cost of shortages, stock out or lost sales, cost of delays in delivery schedules, cost of market complaints, cost of inspection as well as cost of downtime.
 

a) True	b) False
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2. In a Continuous system of manufacturing the goods are manufactured specially to fulfill orders made by customers rather than for store.
 

a) True	b) False
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3. The fundamental objective of location analysis is to maximize the profits by minimizing the total cost of production.
 

a) True	b) False
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4. Production planning constantly keeps a watchful eye on the flow of production and the use of resources to avoid any deviations in the plans and arrange prompt action or adjustment to the original or revised schedules.
 

a) True	b) False
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5. Breakdown maintenance is comparatively economical for machines which have very small repair cost and small down time.
 

a) True	b) False
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**Q. 3. Write Short notes on (Any Three) (15)**

1. Operational Decisions
2. The Value Added Process
3. Functional and Process Layout
4. Preventive Maintenance
5. Objectives of Inspection

**Q. 4. Answer in detail (Any Two) (20)**

1. Explain the different types of production systems.
2. Define Batch Production with its characteristics.
3. Compare the Production Planning and production Control.

**Q. 5. Case study (15)**

Title: Exploring Types of Production: A Case Study in Production and Operations Management

In the field of production and operations management, understanding the different types of production is essential for designing efficient manufacturing processes. This case study delves into the real-world example of a company that produces consumer electronics and examines the various types of production it employs. We will explore the challenges faced, strategies implemented, and the implications for the company's operations.

Company Background:

XYZ Electronics is a prominent consumer electronics manufacturer known for its wide range of products, including smartphones, televisions, and home appliances. The company operates multiple production facilities globally and caters to a diverse customer base.

Challenges Faced:

**High Demand Variability:** XYZ Electronics faced significant variations in demand for its products due to seasonal fluctuations, product life cycles, and market trends. This posed challenges in managing production capacity effectively.

**Rapid Technological Advancements:** The consumer electronics industry is characterized by rapid technological advancements, resulting in short product life cycles. This necessitated agility and flexibility in production processes to keep up with the evolving market.

**Cost Optimization:** Cost reduction and efficiency were critical for XYZ Electronics to maintain competitive pricing while ensuring profitability.

Strategies Implemented:

**Batch Production:** For products with stable demand patterns, XYZ Electronics employed batch production. This involved producing a fixed quantity of a particular product variant before switching to another variant. Batch production allowed for economies of scale, reduced changeover times, and dedicated resources for each product type.

**Mass Production:** For high-volume products with relatively stable demand, XYZ Electronics implemented mass production techniques. This involved producing standardized products in large quantities using assembly lines and specialized machinery. Mass production enabled cost efficiency and streamlined processes but limited flexibility.

**Agile Production:** To address demand variability and shorten product life cycles, XYZ Electronics adopted agile production strategies. This involved flexible

manufacturing systems capable of quickly adapting to changes in product specifications and volumes. Agile production facilitated quick customization and reduced lead times.

**Lean Production:** XYZ Electronics implemented lean production principles to eliminate waste and improve efficiency. The company focused on reducing non-value-added activities, optimizing inventory levels, and implementing continuous improvement initiatives. Lean production helped streamline operations and enhance overall productivity.

**Customized Production:** For niche or high-end products with low volume and highly variable demand, XYZ Electronics employed customized production approaches. This involved configuring production processes and resources to meet specific customer requirements. Customized production allowed for greater flexibility and customization but often at higher costs.

**Results and Implications:**

**Improved Demand Responsiveness:** By employing different types of production, XYZ Electronics achieved better responsiveness to demand fluctuations. The use of batch production, mass production, agile production, and customized production enabled the company to adapt to varying market conditions effectively.

**Enhanced Cost Efficiency:** The implementation of mass production and lean production techniques resulted in cost savings and improved profitability. Economies of scale, optimized inventory management, and waste reduction contributed to cost efficiency.

**Competitive Advantage:** The ability to offer a diverse range of products with varying customization options gave XYZ Electronics a competitive edge. The company could cater to different market segments and customer preferences.

**Technology Adoption:** The adoption of agile production necessitated investments in advanced technologies, such as flexible manufacturing systems and automation. This allowed XYZ Electronics to stay at the forefront of technological advancements and maintain competitiveness.

**Questions:**

**Question 1:** What challenges did XYZ Electronics face in terms of production?

**Question 2:** What types of production strategies did XYZ Electronics implement?

**Question 3:** What were the implications of employing different types of production for XYZ Electronics?

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