GNANAM
SCHOOL OF BUSINESS
Wisdom in Business
AUTONOMOUS

Reg. No.:

Question Paper Code : 214204

MBA DEGREE EXAMINATION APRIL/ MAY 2026
Second Semester
BA4204- Operations Management
(Regulation: 2021)

Time : 3 Hours | Answer ALL Questions | Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. Define Operations Management.
2. Explain the concept of world class manufacturing.
3. Explain the importance of capacity planning.
4. Infer the benefits of effective vendor evaluation.
5. Identify the criteria of good product design.
6. Compare prototyping and simulation tools.
7. State the meaning of bottleneck
8. Explain the Theory of Constraints.
9. State the elements of JIT manufacturing
10. Explain ISO certification

Part – B (5 x 13 = 65 marks)

11. a) Analyze the importance of World-Class Manufacturing (WCM) practices in modern organizations.

OR

b) Analyze the Challenges Faced by Operations Managers in Global Competition

12. a) Analyze Facility Location Factors Affecting Organizational Success.

OR

b) Apply the Make-or-Buy Decision Process with Suitable Examples.

13. a) A smartphone manufacturer launches new models every year, but many products fail due to design defects, poor testing and lack of coordination between departments. The company wants to improve product development efficiency and reduce time to market.

Analyse the product development process and apply tools for efficient product development to improve performance.

OR

b) A large supermarket chain observes that customers leave the store quickly without exploring different sections. Many customers complain that products are difficult to locate and checkout counters are crowded during peak hours. As a result, sales are declining and customer satisfaction is low. The management decides to redesign the facility layout to improve customer experience and increase sales.

Analyse the facility layout principles and apply suitable layout planning techniques to improve store performance.

14. a) Compare and analyse qualitative and quantitative forecasting methods and explain their suitability in different situations.

OR

b) Apply suitable inventory control techniques to reduce cost and improve service level.

15. a) Explain the philosophy and principles of Total Quality Management (TQM).

OR

b) Apply the seven quality tools to solve a production quality problem.

PART C (1 X 15 = 15)

16. a) QuickBite is a fast-growing online food delivery company operating in major cities. Recently, the company has been facing serious service quality issues. Customers frequently complain about late deliveries, wrong orders and poor food quality on arrival. Data collected over three months shows that nearly 18% of orders result in complaints or refunds.

The company's delivery process involves multiple steps such as order placement, restaurant confirmation, food preparation, pickup and final delivery. However, there is poor coordination between restaurants, delivery partners and customer support teams. The company wants to reduce errors and improve service reliability using Six Sigma methodology.

Analyse the case and explain how the company can apply the Six Sigma DMAIC methodology to reduce service defects and improve customer satisfaction.

OR

b) BrightTex Garments is a textile manufacturing company exporting garments to international markets. Recently, the company has started losing foreign clients due to inconsistent product quality, late shipments and lack of standardized processes. Buyers now demand internationally recognized quality certification before placing new orders. Internal analysis reveals that production processes are not properly documented, quality inspections vary across departments and employees follow different work methods. The management has decided to obtain ISO quality certification to standardize processes and regain customer trust. Bright Tex Garments plans to implement ISO certification to improve quality and regain international customers.

Analyse how ISO certification can transform the company's operations and apply suitable quality management practices to ensure successful implementation and long-term sustainability.