



MBA DEGREE EXAMINATIONS: NOV / DEC 2024

(Regulation 2021)

Third Semester

MASTER OF BUSINESS ADMINISTRATION

P21MBE0129: Total Quality Management

COURSE OUTCOMES

CO1: Explain the concept of TQM and cost of quality.

CO2: Analyse process quality through quality management tools and technique.

CO3: Recommend a quality control system for improving process and product quality.

Time: Three Hours

Maximum Marks: 100

PART A (1Q x 20M = 20 Marks) Compulsory

1. ABC Manufacturing Pvt. Ltd., a medium-sized manufacturer of automotive components, struggled with inconsistent product quality and low customer satisfaction. To address these issues, the management decided to adopt a Total Quality Management (TQM) framework. The company identified critical dimensions of quality—performance, reliability, durability, and aesthetics—to align its products with customer expectations.

CO3 [K₄]

To analyze the cost of quality, ABC Manufacturing categorized expenses into prevention, appraisal, and failure costs. Insights from this analysis indicated that investing in training and process improvements could significantly reduce failure costs. The company implemented the 7 QC Tools to identify root causes of defects and employed Statistical Process Control (SPC) using variable and attribute charts to monitor production processes in real-time.

Pursuing ISO 9000 certification formalized their quality management system, enhancing customer trust and market competitiveness. An external ISO audit provided valuable feedback for further improvements, ensuring compliance with international quality standards. This comprehensive approach led to improved product quality and higher customer satisfaction, positioning ABC Manufacturing as a leader in the automotive components industry.

Questions:

1. How did ABC Manufacturing align its product quality dimensions with customer expectations? (5)
2. What was the significance of analyzing the cost of quality for ABC Manufacturing? (5)

3. How did the implementation of the 7 QC Tools contribute to the quality improvement process? (5)

4. What impact did ISO 9000 certification have on ABC Manufacturing's Market position? (5)

PART B (5Q x 4M = 20 Marks) Answer Any Five Questions Only

- | | | | |
|----|---|-----|-------------------|
| 2. | What is the TQM Framework, and why is it important for organizations? (5) | CO1 | [K ₁] |
| 3. | Define the concept of a "Quality Circle." (5) | CO1 | [K ₁] |
| 4. | Explain the role of employee involvement in achieving quality improvement in an organization. (5) | CO2 | [K ₂] |
| 5. | Explain the concept of 5S and its importance in maintaining workplace efficiency. (5) | CO2 | [K ₂] |
| 6. | How does Poka-Yoke contribute to preventing errors in a production process? (5) | CO2 | [K ₁] |
| 7. | Explain the concept of Cost of Quality and its components. (5) | CO3 | [K ₂] |

PART C (3Q x 20M = 60 Marks) Answer Any Three Questions Only

- | | | | |
|-----|---|-----|-------------------|
| 8. | a) List and explain three benefits of implementing TQM in a manufacturing company (10) | CO1 | [K ₂] |
| | b) How does customer focus contribute to TQM, and what is the purpose of the SERVQUAL model? (10) | CO1 | [K ₁] |
| 9. | a) Compare and contrast the philosophies of W. Edwards Deming and Joseph Juran regarding quality management. (10) | CO1 | [K ₂] |
| | b) Discuss the significance of the Cost of Quality in an organization and how it can impact overall performance. (10) | CO1 | [K ₆] |
| 10. | a) Discuss the importance of leadership in building a quality-focused organizational culture. (10) | CO2 | [K ₆] |
| | b) Analyze how recognition and rewards contribute to employee empowerment and motivation in driving quality initiatives. (10) | CO2 | [K ₄] |
| 11. | a) Discuss the steps involved in building a House of Quality (HOQ) in the Quality Function Deployment (QFD) process. (10) | CO2 | [K ₆] |
| | b) Analyze the role of benchmarking in continuous improvement and how it helps organizations stay competitive. (10) | CO2 | [K ₄] |
