



MBA DEGREE EXAMINATIONS: NOV / DEC 2024

(Regulation 2022)

Second Semester

MASTER OF BUSINESS ADMINISTRATION-PROJECT MANAGEMENT

P22MPB2115: Project Design for Quality

COURSE OUTCOMES

- CO1:** Demonstrate knowledge and understanding of contribution of quality theorists to implement quality in the organisation
- CO2:** Demonstrate knowledge and understanding about various ISO Standards and Quality Management system, Quality Policy and documentation at different stages of time
- CO3:** Display ability to demonstrate the knowledge of Total quality management (TQM) concepts and the associated challenges in deployment of TQM
- CO4:** Display ability to analyse the cost associated with quality and perform quality costing analysis for the projects.
- CO5:** Evaluate the suitability of tools related to TQM for application in their projects

Time: Three Hours

Maximum Marks: 100

PART A (1Q x 20 Marks = 20 Marks) Case Study

- 1 ABC Manufacturing Ltd. is a company specializing in the production of electronic components for the automotive industry. Recently, the company has been receiving numerous complaints from clients regarding the durability of its products, particularly their failure under stress. Upon investigation, the management identified several critical issues. The production lines were operating with inconsistent quality standards, and there was no proper documentation system for quality checks. Additionally, the employees lacked adequate training on quality management tools and techniques. Another major issue was the absence of a structured system to track and resolve customer complaints. Dissatisfied clients often felt neglected, leading to strained relationships. Realizing the need for a solution, the management decided to implement a Total Quality Management (TQM) strategy. As part of this initiative, they introduced process flowcharts to standardize operations and conducted training sessions for employees
- CO3 [K4]

on tools like Pareto charts and fishbone diagrams.

To enhance customer satisfaction, a complaint-tracking system was also introduced, enabling the company to record, monitor, and resolve customer issues more effectively. These efforts aimed to establish a culture of continuous improvement and regain customer trust by consistently delivering high-quality products. With TQM principles at the core, the company is now working to ensure long-term quality and efficiency across all its operations.

Questions:

1. Explain the role of Total Quality Management (TQM) in addressing the quality issues faced by ABC Manufacturing Ltd.
2. Suggest two quality management tools that could be used by ABC Manufacturing Ltd. to analyze and resolve product durability issues. Justify your choices based on the case study.

PART B (10Q x 2 Mark = 20 Marks)

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| 2 | Define the term "Total Quality Management (TQM)." | CO1 [K ₁] |
| 3 | List any two traditional quality tools used in Quality Management. | CO4 [K ₁] |
| 4 | Identify the key objective of a Quality Management System. | CO2 [K ₃] |
| 5 | Explain the purpose of a process flowchart in Quality Management. | CO4 [K ₂] |
| 6 | Summarize the importance of customer focus in Quality Management. | CO1 [K ₂] |
| 7 | Explain the difference between Product Quality and Process Quality. | CO1 [K ₂] |
| 8 | List any two contributions of Deming to the field of Quality Management. | CO1 [K ₁] |
| 9 | Explain what a Pareto chart is used for in Quality Management. | CO4 [K ₂] |
| 10 | Outline the primary focus of Six Sigma in improving quality. | CO5 [K ₂] |
| 11 | Classify the differences between Quality Assurance and Quality Control. | CO1 [K ₂] |

Part – C (4Q x 15 Mark = 60 marks)

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| 12 | a) | Evaluate the implementation process of ISO 9001 standards in an organization. Highlight its challenges and outcomes. | CO2 [K ₅] |
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(OR)

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| 12 | b) | Discuss the cost implications of Quality Management Systems in a project, and how they affect project success. | CO4 [K ₆] |
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13 a) Design a strategy for integrating Lean Management tools into Total Quality Management practices to enhance organizational performance. CO5 [K6]

(OR)

13 b) Develop a framework for quality control using tools like Pareto Charts and Control Charts. Explain their application. CO4 [K3]

14 a) Analyze the difference between TQM and Project Quality Management, with examples of their application in different sectors. CO3 [K4]

(OR)

14 b) Examine the evolution of Quality Theories and their relevance in modern quality practices. CO1 [K4]

15 a) Critically appraise the role of DFSS (Design for Six Sigma) in enhancing product quality in the automobile sector. CO5 [K5]

(OR)

15 b) Propose methods to overcome challenges in implementing TQM within multinational corporations. CO3 [K6]
