

42722

May, 2019

**M.Tech. (Mechanical Engineering) II SEMESTER
Total Quality Management (MME-104)**

Time : 3 Hours]

[Max. Marks : 75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

- (a) Define quality. (1.5)
- (b) Define total quality management. (1.5)
- (c) What do you mean by PDCA cycle? (1.5)
- (d) What are the requirements for customer satisfaction? (1.5)
- (e) What is BPR? (1.5)

- (f) What are the goals of TPM? (1.5)
- (g) What do you mean by FMEA? (1.5)
- (h) What is QFD? (1.5)
- (i) What do you mean by product audit? (1.5)
- (j) What are the main elements of EMS 14001? (1.5)

PART-B

- 2. (a) Explain the various components of cost of quality. (10)
- (b) State the dimensions of quality. (5)

- 3. (a) Explain various elements of TQM. (10)
- (b) Discuss various barriers of TQM implementation. (5)

- 4. (a) Discuss the role of effective communication, training and mentoring, recognition and reward in TQM. (10)
- (b) What is service quality? Discuss features of services. (5)

- 5. (a) Explain different components of Juran's Trilogy. (10)
- (b) Discuss ETX model. (5)

- 6. (a) How is the cause and effect diagram prepared? Explain with an example. (10)
- (b) What is benchmarking? What are the reasons for benchmarking? (5)

- 7. (a) Describe the requirements of ISO 9000 certification. How does it help to improve the quality in an organization? (10)
- (b) Discuss the procedure for conducting the quality audit. (5)