Roll No…….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [09]

B. Tech. (Mech. Engg.) (Semester – 8th)
TOTAL QUALITY MANAGEMENT
Subject Code: BMECD1-813
Paper ID: [18112347]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:
a) What do you mean by Total Employee Involvement?
b) "Flexibility is important tool in TQM". Explain the statement.
c) Write steps involved in implementing JIT.
d) What are the main elements of TQM?
e) Define Quality Function Deployment.
f) What are the seven tools in Total Quality Control?
g) What do you understand by ISO?
h) Write the characteristics of JIT.
i) What are new management tools in TQM?
j) Explain Customer Retention.

Section – B **(5 marks each)**

Q2. Discuss the role and importance of Total Technology Management in detail.
Q3. Discuss in detail the benefits of Bench Marking.
Q4. Compare TQM and ISO 9000.
Q5. What is Plan-do-check-act (PDCA) cycle?
Q6. What are the contributions of Deming, Juran and Crosby in TQM framework?

Section – C **(10 marks each)**

Q7. Define TQM. Enlist the priority areas along with essential steps of implementing TQM in an organization.
Q8. a) Derive the expression for Taguchi's loss function.
b) Explain the factors affecting process management.
Q9. Write note on
a) Failure Modes and Effect Analysis (FMEA).
b) Quality circles.