

B.Tech III Year II Semester (R15) Supplementary Examinations December/January 2018/2019

TOTAL QUALITY MANAGEMENT

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

1 Answer the following: (10 X 02 = 20 Marks)

- (a) What is third party audit?
- (b) Who is an internal customer?
- (c) State the usefulness of Pareto diagram.
- (d) What is process management?
- (e) What is an assignment matrix?
- (f) What is process control?
- (g) What is a flow chart?
- (h) What is pedigree analysis?
- (i) What is six sigma?
- (j) What is Poka-Yoke?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Briefly describe the main elements of ISO 9000 quality management system. How this system can be used to improve quality performance? Explain.

OR

3 Discuss the difficulties in implementing a sound total quality management system.

UNIT – II

4 Explain the tools for continuous quality improvement.

OR

5 Explain the problem solving techniques and the methodology.

UNIT – III

6 What is FMEA? How do we make FMEA chart and calculate the RPN? Explain by taking a hypothetical example.

OR

7 What is fault tree analysis? How is it useful in improving the quality of the system?

UNIT – IV

8 Discuss the roles to be played by the employer for an effective implementation of KEIZEN.

OR

9 What do you understand by Taguchi design of experiments? Explain design of experiments with an example stating the advantages and limitations.

UNIT – V

10 What is business process reengineering? Explain the implementation methodology and the advantages.

OR

11 What is supply chain? Explain the various elements of supply chain.
