Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

## Question Paper Code : 51166

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Seventh/Eighth Semester

Computer Science and Engineering

080230074/080120066 — TOTAL QUALITY MANAGEMENT

(Common to Mechanical Engineering)

(Regulation 2008)

Time : Three hours　　　　　　　　　　　　　　　Maximum : 100 marks

(Use of approved Statistical Tables are permitted)

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define quality.

2. List the benefits of TQM.

3. Define Empowerment.

4. List the key elements of supplier partnering.

5. What are the uses of histograms?

6. What is RPN? How is it computed?

7. What are the limitations of QFD?

8. Name the six big losses to be identified for successful implementation of TPM.

9. Define quality audit.

10. List the need of quality system.

PART B — (5 × 16 = 80 marks)

11. (a) Enumerate Deming's 14 points philosophy of management. (16)

Or

(b) (i) What are the dimensions of quality? Discuss them. (10)

(ii) What are the barriers to TQM implementation? (6)

12. (a) (i) Explain various steps in continuous improvement process. (8)

(ii) Elaborate the performance measurement system. (8)

Or

(b) Explain PDCA cycle. Also elaborate steps involved in PDCA cycle.

13. (a) (i) Explain any two tools of seven statistical tools with an example. (10)

(ii) Discuss the role of six sigma in service sectors. (6)

Or

(b) (i) What are the reasons for Bench marking? Explain six important steps in the process of bench marking. (8)

(ii) Define FMEA. Discuss on two types of FMEA. (8)

14. (a) Explain the various pillars of total productive maintenance in detail. (16)

Or

(b) Explain the different categories of quality cost and bring out any two common techniques used for cost analysis. (16)

15. (a) What is documentation? What are the types of documentation? Explain in detail. (16)

Or

(b) Explain how you will implement TQM in a service sector using a case study. (16)