## B.Tech. MECHANICAL ENGINEERING (BTMEVI)

## Term-End Examination December, 2013

BIMEE-019: TOTAL QUALITY MANAGEMENT (TQM)

Time: 3 hours Maximum Marks: 70

**Note**: Attempt any five questions. All questions carry equal marks.

- (a) Explain how TQM evolved over the years, 7+7
  highlighting the special features in each
  stage.
  - (b) Explain how will you improve the quality in sales and service sector using TQM concepts.
- 2. (a) How do clearly defined objectives help in 7+7 managing the organisation?
  - (b) Explain the role of top Management in setting a road map for quality improvement in an organisation.
- 3. (a) Briefly explain the construction and analysis 7+7 of  $\overline{\chi}_{-R}$ . Chart using an examples.
  - (b) What are the uses of Control Charts?

- **4.** (a) Explain zero defect model with an example. 7+7
  - (b) Explain the terms:
    - (i) failure Density
    - (ii) failure rate
    - (iii) Mean Time Between Failure
- 5. (a) Explain different types of JIT production 7+7 system.
  - (b) Discuss in detail the elements of ISO 9000.
- **6.** Write short notes on :

3.5x4=14

- (a) Quality cost
- (b) Quality circle
- (c) MTTF and MTTR
- (d) Taguchi loss function
- 7. (a) What is the registration process for ISO 9000 7+7 Quality System?
  - (b) Describe the merits and demerits of decentralization in an organisation.