

**SECTION - D**

8. Write about :

- (a) Product Audit (10)  
(b) EMS 14001 (10)

9. Explain in detail :

- (a) Importance of Suppliers (10)  
(b) Implementation of ISO 9000 standard. (10)

Roll No. ....

**22615**

**M.Tech. 1st Semester (MAE) -  
CBCS Scheme Examination -  
December, 2016**

**TOTAL QUALITY MANAGEMENT**

**Paper : MTMA21C3**

**Time : 3 hours**

**Max. Marks : 100**

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

**Note :** Attempt **five** questions in all, selecting **one** question from each Section. Q. 1 is **compulsory**. All questions carry equal marks.

1. Answer and explain the following :

- (a) What are the activities of quality planning? (2.5)  
(b) List the benefits of TQM (2.5)

- (c) Cellular manufacturing (2.5)
- (d) What is ETX model ? (2.5)
- (e) List down the pillars of TPM (2.5)
- (f) Limitations of QFD (2.5)
- (g) Quality Audit (2.5)
- (h) List the need of quality system (2.5)

**SECTION - A**

- 2. (a) Explain Juran's model of optimum quality costs. (10)
- (b) Discuss about TQM tools and techniques. (10)
- 3. Write notes on :
  - (a) Classification of Failure cost (10)
  - (b) Leadership for TQM (10)

**SECTION - B**

- 4. Write about :
  - (a) Effective communications (10)
  - (b) Concept of cellular manufacturing (10)
- 5. Explain in detail :
  - (a) Kaizan (10)
  - (b) Training and Mentoring (10)

**SECTION - C**

- 6. Write in detail about seven quality control tools with examples. (20)
- 7. (a) What are the reasons for benchmarking ? Explain six important steps in the process of benchmarking. (10)
- (b) Define FMEA. Discuss two types of FMEA. (10)