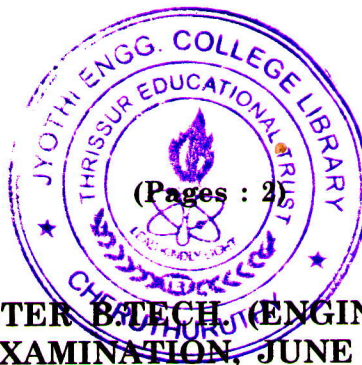


C 56250-A



Name.....

Reg. No.....

**EIGHTH SEMESTER B.TECH (ENGINEERING) DEGREE
EXAMINATION, JUNE 2009**

ME/AM 04 801—QUALITY ENGINEERING AND MANAGEMENT

(2004 Admissions)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

1. (a) Explain the concept of quality.
(b) Explain quality assurance.
(c) List the names and meanings of constituents of 5s practice.
(d) Explain the importance of house of quality in quality function deployment.
(e) How do control charts work ?
(f) Differentiate between Central tendency and Dispersion.
(g) Define Acceptance Sampling. Also explain its objectives.
(h) Define the following :—
 - (i) Acceptable quality level.
 - (ii) Producer's risk.

(8 × 5 = 40 marks)

2. (a) Explain in brief the 14 steps for quality improvement suggested by Crosby.

Or

- (b) (i) Explain the concept of TQM in detail. (10 marks)
(ii) Explain the steps involved in quality control. (5 marks)
3. (a) (i) Why is bench marking done ? (7 marks)
(ii) What is the ultimate aim of FMEA ? (3 marks)
(iii) What are the inputs needed for an FMEA and also list the benefits of FMEA ? (5 marks)

Or

- (b) List the *seven* tools of quality and explain any *four* in detail.
4. (a) Explain the procedures involved in construction of mean and range charts.

Or

- (b) (i) Differentiate control charts for variable and control charts for attributes. (8 marks)
(ii) Explain process capability analysis. (7 marks)

Turn over

5. (a) (i) What are some of the reasons for resorting to multiple or sequential sampling plans ?
(8 marks)
- (ii) Explain ATI and AFL.
(7 marks)

Or

- (b) Explain the following in detail :—

- (i) MTBF. (8 marks)
- (ii) MTTR. (7 marks)

[4 × 15 = 60 marks]