Code No. 3148

FACULTY OF ENGINEERING

B.E. 4/4 (Prod.) I-Semester **(Main)** Examination, December 2010

Subject : **Total Quality Management**
(Elective-I)

Time : 3 Hours Max. Marks: 75

Note: Answer **all** questions of Part - A and answer any **five** questions from Part-B.

PART – A (25 Marks)

1. Define TQM and explain its relevance in productivity.
2. What are the objectives of QIS ?
3. What is the working principle of ANOVA ?
4. Explain the method of QFD.
5. What is brain storming ?
6. Define product performance.
7. What are multi-variant charts?
8. What is Kansei engineering ?
9. State the importance of proper packaging .
10. Define theory Z.

PART – B (5x10=50 Marks)

11.(a) Describe Maslow need theory. State its importance in quality culture. (5)
(b) Describe the four major categories of costs associated with quality management. (5)

12.(a) Distinguish between Total quality control and Total quality management. (5)
(b) Explain Taguchi's quality loss function with an illustration for estimating the same? (5)

13.(a) Discuss the steps involved in designing Customer-Satisfaction Surveys. (5)
(b) Describe the P – D – C – A cycle for problem solving. (5)

14.(a) Briefly describe the following : (5)
(i) cause and effect diagram (ii) Scatter diagrams
(b) Discuss various data collection plans. (5)

15.(a) Discuss the strategic value of information in TQM. (5)
(b) Discuss the concept and philosophy of quality circles. (5)

16.(a) Distinguish between 'Chance Causes' and assignable causes of variation giving suitable examples. (5)
(b) Discuss the structure of Total preventive maintenance. (5)

17. Write short notes on any four of the following : (2.5x4)
(a) FMECA
(b) JIT
(c) Herzbeg 2 factor
(d) AQL