

**FACULTY OF ENGINEERING**

B.E. 4/4 (Prod.) I – Semester (Main) Examination, December 2011

Subject: **Total quality Management (Elective – I)**

Time: 3 Hours

Max. Marks: 75

**Note:** Answer all questions from Part A. Answer any Five questions from Part B.**PART – A (25 Marks)**

1. What are primary needs as per Maslow?
2. Relate theory of X, Theory of Y and Theory of Z to leadership / manager in an organization.
3. Define value. List the phases in value Engineering.
4. What is Weibull distribution?
5. Define 'F' ratio. If 'F' calculated is greater than 'F' table value at 5% but 'F' calculated is smaller than 'F' table value at 1%, what conclusion you take.
6. For a two way Anova, how do you compute d.o.f. for rows and columns (source of variation).
7. Mention any two commercial makes for MIS.
8. What do you mean by Consumer Risk and Manufacturer Risk?
9. What is JIT. Is it same as 'KANBAN'.
10. Why flexibility is required in manufacturing programme.

**PART – B (10 x 5 = 50 Marks)**

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|--------|---|-------|
| 11.(a) | Why it is necessary to rate the supplier? Give an account by tools / techniques of supplies or vendor rating.   | 6     |
| (b)    | Examine the role of middle management in maintaining quality.   | 4     |
| 12.    | Give an account of self development and empowerment programmes. How far these are successful in Indian Context. | 5+5   |
| 13.(a) | Differentiate between QIS and MIS.  | 5     |
| (b)    | Discuss the various steps involved in creating new software and features of QIS software.                       | 5     |
| 14.    | Write note on: Pareto Analysis and its impact on production, cause and effect study, bath tub curve.            | 10    |
| 15.    | Write short notes on:   | 4x 2½ |
|        | a) Control limits for $\bar{X}$ and R chart   |       |
|        | b) Assignable Vs chance causes  |       |
|        | c) Quality loss function  |       |
|        | d) Taguchi on $V_3$ off line quality control.   |       |
| 16.(a) | Explain the concept of POKAYOKE.  | 3½    |
| (b)    | Write note on: AQL, LTPD, AOQL.   | 6½    |