No. of Printed Pages : 2

ET-524(A)/ET-534(A)

B.Tech. Civil (Construction Management) / B.Tech. Civil (Water Resources Engineering) B.Tech (Aero space Engineering)

04702

Term-End Examination

June, 2011

ET-524(A)/ET-534(A) : PRINCIPLES OF ENGINEERING MANAGEMENT AND ECONOMICS

Time : 3 hours *Maximum Marks : 70*

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

1. (a) Define coordination. How can it be achieved ? 5+5

   (b) Explain the four classical principles to achieve vertical coordination.

2. Explain the assumptions made in Douglas McGregor's Theory X and Theory Y. How does it differ from Herzberg theory of two factors ? 10

3. (a) Discuss the decision making process. Under what conditions are the decisions made ? 5+5

   (b) Discuss the Brain storming technique for identification of alternatives in decision making process.

4. Define value Engineering. Explain various phases of a VE, Job plan. Illustrate your answer with suitable examples. 10

5. (a) Explain any two planning techniques used in engineering projects. 5+5
   (b) Define various types of contracts in construction management.

6. (a) What is acceptance sampling ? Discuss with the help of a flow charts various types of sampling plans. 5+5
   (b) Explain the purpose of OC curve. Draw an OC curve and mark the following.
      (i) Producers Risk (α)
      (ii) Consumers Risk (β)
      (iii) Acceptable Quality Limit (AQL)
      (iv) Lot Tolerance percent Defective (LTPD).

7. Explain with the help of neat sketches functional, Project, and Matrix Organizations. List out the advantages and disadvantages of each. How does a matrix organization combine the advantages of both functional and project form of organizations ? 10

8. Write short notes on ***any four*** of the following :-
   (a) Statistical Quality Control **4x2½=10**
   (b) Managerial Grid
   (c) Job rotation V_s Job enrichment
   (d) Span of control
   (e) Total Quality Management.
