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

Term-End Examination

01135

December, 2014

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

Time : 3 hours   *Maximum Marks : 70*

Note : *Attempt any* **five** *questions. Question no.* **1** *is* **compulsory***. The answers shall be in your own language.*

1. Fill in the blanks :

    (a) Managers gather information from _____ , _____ , _____ and other _____ . **2**

    (b) Management is the process of _____ , _____ , _____ and _____ the efforts of organisational members and use of resources in order to achieve stated organisational goals. **2**

    (c) Elasticity is always with respect to _____ and there are as many _____ of _____ as there are demand-_____ . **2**

    (d) A utility function is _____ while a productive function is _____ . **1**

(e) In simple monopoly, a firm charges a _____ for its products for all its _____ . *1*

(f) Reward Power is the ability to _____ while Coercive Power is the ability to _____ . *1*

(g) The administrative/structural subsystem is a _____ , _____ , _____ within the organisation. $1\frac{1}{2}$

(h) When the job is expanded horizontally it is known as _____ and when vertically, job _____ . *1*

(i) Ability to exercise influence is _____ while right to command and extract obedience is _____ . $1\frac{1}{2}$

(j) Value is defined as the ratio of _____ divided by _____ . *1*

2. Explain the role of a manager. What do you understand by Theory 'X' and Theory 'Y' ? How are they different from Herzberg's Two Factor theory ? *4+5+5*

3. (a) What do you understand by Law of Demand ? Explain the demand elasticities based on the demand-determinants, with the help of examples. *9*

(b) Define production function. Explain the importance of total productivity curve. *5*

4. (a) Explain the three basic propositions required for the analysis of business environment in any economy. *8*

(b) Explain briefly the theory of work motivation. *6*

5. (a) What do you understand by co-ordination ? Explain the need, benefits and approach to co-ordination. *9*

(b) Distinguish between authority and power. Also explain the dynamics of power. *5*

6. (a) How do you define Value Engineering ? Explain the same with the help of illustrations. *9*

(b) Explain CPM as a project scheduling technique. *5*

7. Write short notes on any *four* of the following :

$$4 \times 3\frac{1}{2} = 14$$

(a) Breaking-even Monopolist

(b) Categories of Power

(c) Types of Values and Functions

(d) Derivation of Demand-Revenue Relationship

(e) Communication and Interpersonal Relations

(f) ISO Certification