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

## Term-End Examination

00483

December, 2018

## 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. Assume any missing data suitably.

- 1. Enumerate the principles of Scientific Management proposed by Taylor. What were the main criticisms of this thought of management? How, in your opinion, can the Human Relations Approach overcome these problems and the criticism of this school of management? 4+3+3
- 2. (a) Explain the conditions under which managers may have to make decisions.
  - (b) Discuss the advantages and limitations of Group Decision Making. 5+5

- **3.** (a) Explain various types of price elasticities. What are the factors which govern the price elasticity of demand?
  - (b) "India has a very complex mixed economy."

    Comment. 5+5
- 4. What is coordination? What are its benefits?
  How is vertical coordination achieved in an organisation? Discuss.
  3+2+5
- **5.** (a) Differentiate between "Quality Assurance" and "Quality Control".
  - (b) How does the quality affect an organisation?
    What are the drives for quality. 5+5
- 6. What is a Detailed Project Report (DPR)? What are the documents and data necessary for its preparation. How does it differ from Techno-economic Feasibility Report?

10

- 7. (a) What is "Power"? How is it different from "Authority"? What is meant by "Dynamics of Power"?
  - (b) How will conducting of organisation dynamics help in improving an organisation?
     Discuss the steps involved and the likely benefits.

- 8. What do you understand by the term "Programming" and "Scheduling" of projects?

  Discuss the steps involved in programming and scheduling. Discuss briefly the techniques used in engineering projects.

  3+4+3
- 9. What do you understand by the concepts "Sustainable Development" and "Environmental Impact Assessment"? Discuss the five basic contents of EIA.

10

- 10. Write short notes on any **four** of the following:  $4 \times 2 \frac{1}{2} = 10$ 
  - (a) Time Value of Money
  - (b) Johari Window
  - (c) Assumptions made under Theory 'X' and 'Y'
  - (d) Break Even Analysis
  - (e) Operating Characteristic Curve (OCC)