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SIXTH SEMESTER B.TECH. (ENGINEERING) [09 SCHEME) DEGREE EXAMINATION, APRIL 2016

EC/PTEC/AI/EE/PTEE/BM/IC 09 602—ENGINEERING ECONOMICS AND PRINCIPLES OF MANAGEMENT

Time: Three Hours

Maximum: 70 Marks

Section I (Engineering Economics)

Part A

Answer all questions.

1. Distinguish between technical efficiency and economic efficiency.

(2 marks)

2. What are factors determining demand?

(2 marks)

3. Write the formula for single payment compound amount.

(1 mark)

[2 + 2 + 1 = 5 marks]

Part B

Answer any two questions.

- 4. What do you mean by elasticity of demand? Illustrate its two major types.
- 5. Explain break-even analysis.
- 6. A company takes a loan of Rs. 20,00,000 to modernize its boiler section. The loan is to be repaid is 20 equal installments at 12% interest rate compounded annually. Find the equal installment amount that should be paid for the next 20 years.

 $(2 \times 5 = 10 \text{ marks})$

Part C

Answer all questions.

7. (a) Define elasticity of supply. List out the factors determining the elasticity of supply. Illustrate the different types of elasticity.

(10 marks)

Or

(b) Explain in detail about inflation and deflation.

(10 marks)

Turn over

8. (a) Explain the different methods of project analysis.

(10 marks)

Or

(b) An Engineer bids for an elevator to be installed is a new building. The details are given below:

Bid	Engineer Estimates		
	Initial Cost	Service Life	Maintenance Cost
	(Rs.)	(Years)	(Rs.)
Alpha Elevator	4,50,000	15	27,000
Beta Elevator	5,40,000	15	28,500

Determine which bid should be accepted based on the present worth method of comparison assuming 15% interest rate compounded annually.

(10 marks)

 $[2 \times 10 = 20 \text{ marks}]$

Section II (Principles of Management)

Part A

Answer all questions.

1. What is difference between risk and uncertainity?

(2 marks)

2. What is PERT?

(1 mark)

3. Name the phases of project management.

(2 marks)

[2 + 1 + 2 = 5 marks]

Part B

Answer any two questions.

- 4. What is job analysis? List out its advantages.
- 5. Explain the significance of a balance sheet.
- 6. What tests are employed to study the effectiveness of advertising?

 $(2 \times 5 = 10 \text{ marks})$

Part C

Answer all questions.

7. (a) Explain in detail about the functions and principles of management.

(10 marks)

Or

(b) Explain the importance and process of performance appraisal. Explain the methods of performance appraisal.

(10 marks)

8. (a) What is meant by marketing mix? Discuss in detail about the various constituents of marketing mix.

(10 marks)

Or

(b) Explain the elements and components of cost. Explain the procedure for preparing a cost sheet.

(10 marks)

 $[2 \times 10 = 20 \text{ marks}]$