

Code: CE8T2

**IV B.Tech - II Semester – Regular / Supplementary Examinations  
March 2020**

**ENGINEERING ECONOMICS AND PROJECT  
APPRAISAL  
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

**PART – A**

Answer *all* the questions. All questions carry equal marks

11 x 2 = 22 M

1. Write a short notes on:

- a) Law of Supply.
- b) Law of Demand.
- c) Present Value.
- d) Design selection for a product.
- e) Building Material Selection.
- f) Opportunity Cost.
- g) Break Even Point.
- h) Payback Period.
- i) Equivalent Uniform Annual Cost.
- j) Project Stores.
- k) Job Costing.

## PART – B

Answer any **THREE** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Define Engineering Economics and explain its scope. 8 M
- b) What are the ways by which the economic efficiency can be improved? 8 M
3. a) List and explain the different situations deserving elementary economic analysis. 8 M
- b) What is Process Modification? Explain the steps in the Process Modification. 8 M
4. a) Explain managerial significance and limitations of Break Even Analysis. 8 M
- b) Number of units sold is 20,000 unit, selling price per unit Rs.30/-, variable cost per unit is Rs. 15/- per unit and fixed cost is Rs.80,000/-. Find out (i) BEP (in units) (ii) Break Even Sales (in rupees) (iii) P/V ratio (iv) How many number units sold to earn a profit of Rs.1,20,000/-. 8 M

5. a) Explain the benefit-cost ratio methods for project evaluation. 8 M

b) Consider the case of the company with the following two investment alternatives each costing 9,00,000. The details of the cash inflows are as follows: 8 M

Year	Cash flows (in ₹ )	
	Project-1	Project- 2
1	3,00,000	6,00,000
2	5,00,000	4,00,000
3	6,00,000	3,00,000

The cost of capital is 10% per year. Which one will you choose under NPV Method?

6. a) Explain the phases of project life cycle. 8 M

b) Describe unit costing and job costing methods. 8 M