Code: CE8T2
IV B.Tech - II Semester - Regular Examinations - March 2018

## ENGINEERING ECONOMICS AND PROJECT APPRAISAL <br> (CIVIL ENGINEERING)

Duration: 3 hours
Max. Marks: 70
PART - A

Answer all the questions. All questions carry equal marks $11 \times 2=22 \mathrm{M}$
1.
a) List types of Efficiency.
b) Micro Economics.
c) Role of Building material selection in economic Analysis.
d) What is net present value?
e) Process Planning.
f) Out of Pocket Cost.
g) Marginal Cost.
h) Payback Period.
i) Benefit Cost Ratio.
j) Project Life Cycle.
k) Unit Costing.

## PART - B

Answer any THREE questions. All questions carry equal marks.

$$
3 \times 16=48 \mathrm{M}
$$

2.a) Define Economics and explain its nature.
b) Distinguish between micro-economics and macroeconomics.
3. Discuss the marginal selection for a product and the design selection for a product with suitable examples.

16 M
4.a) Explain any four cost concepts with examples.

8 M
b) Consider the following data of a company for the year 2018. Sales Rs.2,40,000/-, Fixed cost Rs.50,000/- Variable cost Rs.75,000/-. Find

8 M
i) $\mathrm{P} / \mathrm{V}$ ratio
ii) Profit
iii) BEP
iv) Margin of Safety
5.a) Explain the benefit-cost ratio methods for project
evaluation.
b) Consider the case of the company with the following two investment alternatives each costing ₹ $5,00,000$. The details of the cash inflows are as follows: 8 M

| Year | Cash flows (in ₹) |  |
| :---: | :---: | :---: |
|  | Project-1 | Project- 2 |
| 1 | 150000 | 50000 |
| 2 | 200000 | 150000 |
| 3 | 250000 | 200000 |
| 4 | 150000 | 300000 |
| 5 | 100000 | 200000 |

The cost of capital is $12 \%$ per year. Which one will you choose under NPV Method?
6. Explain the concept of project. What are the various stages in the total project life cycle? Make a flow chart to explain the same.

