



# CBCS SCHEME

17AU752

## Seventh Semester B.E. Degree Examination, Jan./Feb. 2021 Engineering Economy

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Explain with neat figure law of demand and supply. (10 Marks)  
b. Discuss Briefly factors influencing the elasticity of demand. (10 Marks)

OR

- 2 a. Write a note on law of returns with neat diagram. (08 Marks)  
b. A person wants to gift a car to his daughter when she would turn 18 years, six years from now. He decides to put away money in her name during her next six birthdays. He wants to deposit Rs.25,000/- in the first year and go or increasing it by Rs.5000/- every year for next 6 years. If he estimates that a car would cost Rs. 5 lakhs when he wants to buy one. How much more money should be added to the maturity amount that he receives from the bank, if it is assumed to grow at 11.5%. Compounded annually? (12 Marks)

### Module-2

- 3 a. List and explain conditions for present worth comparison. (10 Marks)  
b. Explain Briefly :  
i) Present-worth equivalence  
ii) Net present worth. (10 Marks)

OR

- 4 a. Two holiday cottages are under consideration. Compare the present worth of the cost of 24 years service, at an interest rate of 5 percent. When neither cottage has a realizable salvage value.

|                         | Cottage 1 | Cottage 2 |
|-------------------------|-----------|-----------|
| First cost              | Rs. 4500  | Rs.10,000 |
| Estimated life          | 12 years  | 24 years  |
| Annual maintenance Cost | Rs. 1000  | Rs. 720   |

- b. Explain briefly assets with unequal lives. (10 Marks)

### Module-3

- 5 a. Explain briefly rates of return in engineering economics studies. (10 Marks)  
b. List and explain internet rate of return misconceptions. (10 Marks)

OR

- 6 A fresh mechanical engineer wants to become an entrepreneurs. He starts a (CAD)center to give design solutions to Small Scale Industries. He expects that his software and business would last for 5 years. The initial outlay and cash flow pattern for the new business are as listed below. Find the internal rate of return for the new business if he estimate a salvage value of Rs.1,00,000/- at the end of 5 years. (20 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice.

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Module-4

- 7 a. List and explain need for estimating and costing. (10 Marks)  
b. List and explain elements of product cost. (10 Marks)

OR

- 8 a. Explain how selling price is calculated. (10 Marks)  
b. Explain briefly methods of costing. (10 Marks)

Module-5

- 9 a. Explain briefly sources of finance. (10 Marks)  
b. Explain in detail source of financial information. (10 Marks)

OR

- 10 a. List and classify the accounting. (10 Marks)  
b. What are basic concepts in accounting or accounting terminology? (10 Marks)

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