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Total No. of Printed Pages: 1

Total No. of Questions: [09]

B. Tech Civil Engg. (Semester – 8th)
ENERGY MANAGEMENT
Subject Code: BELEO-F97
Paper ID: [OE3110704]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a) Explain the difference between preliminary and detailed energy audits.
- b) Define the term maximum demand.
- c) What is the main drawback of simple playback method?
- d) What is the energy performance contracting?
- e) Define energy management.
- f) What are the various factors which affects the motor performance?
- g) What do you mean by energy security?
- h) What factors affect the choice of lighting?
- i) What are energy needs of growing economy?
- j) What is the main limitations of cash flows methods?

Section – B

(5 marks each)

- Q2. What is Energy conservation and Explain its importance.
- Q3. Define power factor. What are the advantages of power factor improvement?
- Q4. What is the need of energy management?
- Q5. Explain the role of ESCOs in detail.
- Q6. Write a short note on the growth of energy sector in India.

Section – C

(10 marks each)

- Q7. Define energy audit. What is its need? Explain various components of energy audit.
- Q8. What is electricity tariff? Explain in detail different types of electricity tariff.
- Q9. Discuss in detail financial analysis techniques.