Roll No……..….. **Total No. of Printed Pages: 01**
Total No. of Questions: 09

Integrated Dual Degree B.Com.-M.Com. (Semester -4th)
ENERGY MANAGEMENT
Subject Code: BELE0F97
Paper ID: [OE3410104]

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 consists 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 importance of energy management in today's economy.
b) What are the primary energy needs of a growing economy?
c) Explain the concept of electricity tariffs and its impact on consumption.
d) What are the primary methods of load management?
e) Define energy audit and explain why it is essential for industrial facilities.
f) What are the different types of energy audits, and when should each be used?
g) Why is financial management important in energy management projects?
h) Explain the simple payback period and its role in investment decisions.
i) What are the main objectives of energy sector reforms?
j) How does energy use contribute to air pollution and climate change?

Section – B **(5 marks each)**

Q2. Describe the long-term energy scenario for developing countries.
Q3. How does energy pricing influence consumption and conservation?
Q4. What are the factors affecting the performance and efficiency of induction motors?
Q5. Why is it important to consider motor rewinding and replacement?
Q6. List the benefits of using energy-efficient motors in industries.

Section – C **(10 marks each)**

Q7. What is the net present value (NPV), and how is it calculated in energy projects?
Q8. Describe the significance of internal rate of return (IRR) in financial analysis with respect to Energy Management.
Q9. How does cash flow analysis support decision-making in energy projects?