

B.Tech. VIII Sem. (Main/Back) Examination, April/May - 2025  
Open Elective-II  
8AG6 - 60.1 Energy Management

Time : 3 Hours

Maximum Marks : 70

**Instructions to Candidates:**

*Attempt all Ten questions from Part A, Five questions out of seven questions from Part B and Three questions out of five questions from Part C.*

*Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.*

*Use of following supporting material is permitted during examination. (Mentioned in form No. 205).*

**PART - A**

(Answer should be given up to 25 words only)

All questions are compulsory.

(10×2=20)

1. Define Energy.
2. What is Energy Management?
3. What do you mean by Commercial Energy?
4. Explain Energy Integration.
5. Energy Audit.
6. Discuss energy resources.
7. What are different energy sectors?
8. Describe energy pricing.
9. Write about LOW Grade Energy.
10. Explain Renewable Energy.

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**PART - B**  
**(Analytical / Problem Solving Questions)**

**Attempt any Five questions.**

**(5×4=20)**

1. List the primary and secondary energy sources. Also discuss the energy scenario of India.
2. Define energy conservation, mention its importance and describe energy conservation Act - 2001.
3. List the key instruments for energy audit and explain its functions.
4. Explain in detail about "Concept of Green Buildings".
5. Discuss the Cleaner energy sources.
6. Describe the energy demand management.
7. Explain energy forecasting techniques.

**PART - C**  
**(Descriptive / Analytical / Problem Solving / Design Questions)**

**Attempt any Three questions.**

**(3×10=30)**

1. Explain different types of energy audit. Discuss in detail of about all three phases of energy audit.
  2. Write an essay on "Energy for sustainable Development".
  3. Explain different sources of Renewable energy also give its applications in different sectors.
  4. Discuss the importance of energy Management Information system (EMIS) to implement an Energy Management Programme.
  5. How the energy conservation can be made in the refrigeration and air condition based systems? Discuss in detail.
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