

**BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)**  
**B.Tech.Sem - VI MECHANICAL :SUMMER- 2022**  
**SUBJECT : ENERGY AUDIT & MANAGEMENT**

Day : Thursday  
Date : 23-06-2022

**S-13455-2022**

Time : 02:30 PM-05:30 PM  
Max. Marks : 60

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**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks
  - 3) Use of non – programmable **CALCULATOR** is allowed.
  - 4) Assume suitable data if necessary.
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|------------|---|------------------|
| <b>Q.1</b> | Why is conservation of energy important?<br><b>OR</b><br>What are the duties of energy managers?  | (10)<br><br>(10) |
| <b>Q.2</b> | What is mass balance?<br><b>OR</b><br>Explain the application of Shanky diagram.  | (10)<br><br>(10) |
| <b>Q.3</b> | Explain the steps involved in retrofitting a home.<br><b>OR</b><br>How is IRR of a project calculated?                                      | (10)<br><br>(10) |
| <b>Q.4</b> | How can energy be conserved in a pump?<br><b>OR</b><br>How can you minimize the supply and demand gap of energy?                            | (10)<br><br>(10) |
| <b>Q.5</b> | What is thermal insulation? How is it helpful for energy management?<br><b>OR</b><br>How is energy conserved in industrial heating systems? | (10)<br><br>(10) |
| <b>Q.6</b> | What is the methodology to carry out an energy audit?<br><b>OR</b><br>What are the duties and responsibilities of energy auditors?          | (10)<br><br>(10) |

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