TED (21) 6032B Reg.No.............................

(Revision-2021) Signature..........................

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL - 2025**

**ENERGY CONSERVATION & MANAGEMENT**

[Maximum marks: 75] (Time: 3 Hours)

**PART A**

1. **Answer all questions in one word or one sentence. Each question carries one mark.**

**(9 x 1 = 9 Marks)**

|  |  |  |
| --- | --- | --- |
|  | Moduleoutcome | Cognitivelevel |
| 1 | What is the application of solar energy? | M1.02 | U |
| 2 | List different types of biogas plants | M1.04 | R |
| 3 | Explain the importance of energy management | M2.02 | U |
| 4 | Define energy efficiency | M2.03 | U |
| 5 | Write the full form of BEE  | M2.04 | U |
| 6 | Write Two advantage of energy efficient lighting. | M3.01 | U |
| 7 | HVAC stands for ………. | M3.03 | U |
| 8 | List the types of Energy Audit | M4.01 | R |
| 9 | Detailed energy auditing is carried out in number of phases: | M4.02 | U |

**PART B**

1. **Answer any eight questions from the following. Each question carries three marks.**

**(8 x 3 = 24 Marks)**

|  |  |  |
| --- | --- | --- |
|  | Module outcome | Cognitive level |
| 1 | Explain the renewable energy and non-renewable energy sources | M1.01 | U |
| 2 | List any 3 disadvantages of solar Energy | M1.03 | R |
| 3 | List different pollutants in the atmosphere. | M2.01 | R |
| 4 | List the steps involved in energy management | M2.02 | R |
| 5 | Differentiate between Energy Conservation and Energy Efficiency. | M3.01 | U |
| 6 | Explain ECBC. | M3.02 | U |
| 7 | Differentiate between AC and HVAC. | M3.03 | U |
| 8 | Write the manner which every energy audit shall be conducted. | M4.01 | A |
| 9 | Define Energy Audit as per Energy Conservation Act, 2001 | M4.01 | U |
| 10 | Write the manner which every energy audit shall be conducted. | M4.03 | A |

**PART C**

**III.Answer all questions. Each question carries seven marks.**

 **(6 x 7 = 42 Marks)**

|  |  |  |
| --- | --- | --- |
|  | Moduleoutcome | Cognitivelevel |
| III | Classify different energy resourcesORWhat are the advantages and disadvantages of tidal energy? | M1.01 | U |
| IV | M1.03 | U |
| V | Explain about acid rainORList mandatory products for star labeling. | M2.02 | U |
| VI | M2.04 | R |
| VII | List different energy conservation ideas.ORWhat are the components that make up an HVAC system? | M3.01 | R |
| VIII | M3.03 | A |
| IX | Explain about Preliminary energy audit methodologyORWhat is the purpose of a Sankey diagram? | M4.01 | U |
| X | M4.04 | U |
| XI | Draw and explain wind energy system for power generation. ORWrite different benefits of Energy efficiency. | M1.02 | A |
| XII | M2.03 | U |
| XIII | List different strategies to Save Energy in Commercial BuildingsORExplain about different instruments used for an energy audit | M3.02 | R |
| XIV | M4.02 | U |