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)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | Module  outcome | Cognitive  level |
| 1 | Define solar radiation | M1.02 | U |
| 2 | List different types of biogas plants | M1.04 | R |
| 3 | Define energy management | M2.02 | U |
| 4 | Define energy efficiency | M2.03 | U |
| 5 | BEE Stands for ……. | M2.04 | U |
| 6 | Define energy conservation. | 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 | R |

**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 | Define renewable energy and non-renewable energy sources | M1.01 | U |
| 2 | List any 3 disadvantages of Tidal 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 | What are the 3 energy levels of ECBC. | M3.02 | A |
| 7 | Differentiate between AC and HVAC. | M3.03 | U |
| 8 | Write the manner which every energy audit shall be conducted. | M4.01 | U |
| 9 | Define Energy Audit as per Energy Conservation Act, 2001 | M4.01 | U |
| 10 | What are the different phases in carrying out Detailed energy auditing? | M4.03 | A |

**PART C**

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

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

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| --- | --- | --- | --- |
|  | | Module  outcome | Cognitive  level |
| III | Classify different energy resources  OR  List the advantages of wind energy. | M1.01 | U |
| IV | M1.03 | R |
| V | Explain current energy scenario of India  OR  Write mandatory products for star labeling. | M2.02 | A |
| VI | M2.04 | U |
| VII | List different energy conservation ideas.  OR  What are the components that make up an HVAC system? | M3.01 | U |
| VIII | M3.03 | A |
| IX | Explain about Preliminary energy audit methodology  OR  Illustrate sankey diagram. | M4.01 | U |
| X | M4.04 | U |
| XI | Draw and explain solar system for power generation.  OR  List different benefits of Energy efficiency. | M1.02 | A |
| XII | M2.03 | R |
| XIII | List different strategies to Save Energy in Commercial Buildings  OR  Explain about different instruments used for an energy audit | M3.02 | R |
| XIV | M4.02 | U |