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Roll No ...

**ME-801(A) (GS)**

**B.E. VIII Semester**

Examination, May 2018

**Grading System (GS)**

**Energy Management And Audit**

(Elective - III)

Time : Three Hours

Maximum Marks : 70

- Note :**
- Attempt any five questions.
  - All questions carry equal marks.
  - Draw neat diagrams wherever required.
- List and enumerate the Goals of Energy Audit and where they can be applied.
    - Explain the different types of representations in Energy consumption.
  - Discuss force field analysis related to energy planning.
    - Explain key elements in Energy Action Planning.
  - State importance of energy audit. Discuss types of energy audit.
    - Explain about fuel and energy substitution.
  - Discuss various types of energy audit instruments.
      - Write technical note on Energy Conservation Act 2001.
    - Explain the barriers in Energy Audit and how it can be overcome.

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PTO

- Discuss the different methods of return on investment analysis for energy projects with suitable example.
  - How energy can be conserved in Boilers? Discuss briefly.
- Explain the concept of present worth method.
  - List the different types of depreciation methods.
- The integrated paper plant has produced 119366 MT of paper during the year 2014-15. The management has implemented various energy conservation measures as part of PAT scheme and reduced the specific energy consumption from 53GJ/tonne of product to 50 GJ/tonne of product. The actual production during the assessment year (2016-17) is 124141 MT. Calculate the plant energy performance and state your inference.
- Write short note on following (any two):
  - Building energy management
  - Thermal Insulation
  - Applications of FBC
  - Energy policy purpose

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