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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 :** i) Attempt any five questions.  
ii) All questions carry equal marks.  
iii) Draw neat diagrams wherever required.

1. a) List and enumerate the Goals of Energy Audit and where they can be applied.  
b) Explain the different types of representations in Energy consumption.
2. a) Discuss force field analysis related to energy planning.  
b) Explain key elements in Energy Action Planning.
3. a) State importance of energy audit. Discuss types of energy audit.  
b) Explain about fuel and energy substitution.
4. a) i) Discuss various types of energy audit instruments.  
ii) Write technical note on Energy Conservation Act 2001.  
b) Explain the barriers in Energy Audit and how it can be overcome.

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5. a) Discuss the different methods of return on investment analysis for energy projects with suitable example.  
b) How energy can be conserved in Boilers? Discuss briefly.
6. a) Explain the concept of present worth method.  
b) List the different types of depreciation methods.
7. 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.
8. Write short note on following (any two):  
i) Building energy management  
ii) Thermal Insulation  
iii) Applications of FBC  
iv) Energy policy purpose

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