



Reg. No. :

Name :

**Eighth Semester B-Tech. Degree Examination, April/May 2012
(2008 Scheme)
08.801 : ENERGY MANAGEMENT (MPU)**

Time : 3 Hours

Max. Marks : 100

Instruction : Answer **all** questions from Part **A** and **any three** from Part **B**.
Answer any **one** question from **each** Module.

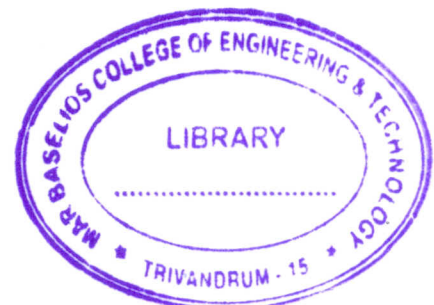
PART – A

1. Write short note on heat pump.
2. What are the methods to improve the efficiency of a thermal power plant ?
3. Explain pumped storage system.
4. What is meant by enrichment of uranium ?
5. List the various waste heat recovery systems.
6. What are the factors affecting the performance of an MHD generator ?
7. What is the significance of energy management ?
8. What are the energy conservation measures in an HVAC system ?
9. Briefly explain the supply side and demand side energy management.
10. Discuss the electrical ECO's in a commercial building. **(4x10=40 Marks)**

PART – B

Module – I

11. a) Explain the different biomass conversion technologies. **10**
b) Write short note on peak load, base load and intermediate load power plants. **10**
12. a) Explain the working of a PHWR. **10**
b) Write short note on micro hydel stations. **10**



P.T.O.

**Module – II**

13. a) What are energy management control systems ? 10
b) Briefly explain the intermediate energy auditing. 10
14. a) Discuss the importance of energy strategy and energy planning. 10
b) What are the common instruments required for conducting energy audit ? 10

Module – III

15. a) Explain the working of an IC engine based cogeneration system. 10
b) What are the various modes of distributed generation ? 10
16. a) What are the thermodynamic energy conservation opportunities in a steam turbine plant ? 10
b) Sketch and explain the working of a combined cycle power plant. 10
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