



Reg. No. :

Name :

Sixth Semester B.Tech. Degree Examination, May 2011
(2008 Scheme)
08-606.2 : NEW ENERGY SYSTEMS

Time : 3 Hours

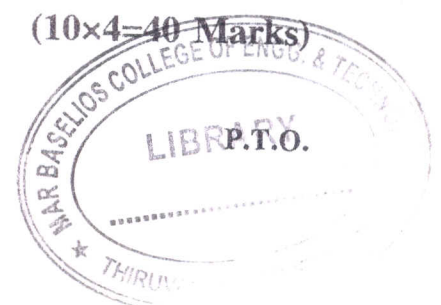
Max. Marks : 100

Instructions : 1) Answer all questions from Part A.
2) Answer one question each from Module I, II, III of Part B.

PART – A

1. Discuss the principle of MHD generation.
2. What is Seebeck Thermo electric effect ?
3. What do you mean by work function of a metal ?
4. Write short notes on :
 - a) Types of electrodes of a fuel cell
 - b) Disadvantages of fuel cell.
5. What are the main components of a flat plate solar collector, explain the functions of each.
6. What are the main applications of solar pond.
7. What is the basic principle of OTEC.
8. What is meant by geothermal field.
9. Write a short note on wave energy conversion machines.
10. Describe thermo-chemical method for hydrogen production.

(10×4=40 Marks)





PART – B

Module – I

11. Describe MHD open cycle system. What are the main advantages of MHD power generation ?

OR

12. What is a fuel cell ? Describe the principle of working of a fuel cell with reference to H₂-O₂ cell.

Module – II

13. Describe 'closed cycle' OTEC power plants with its advantage over open cycle system.

OR

14. Describe in brief, the different energy storage methods used in the solar system.

Module – III

15. a) Describe a binary cycle system for liquid dominated system.

b) What are the main application of geothermal energy.

OR

16. What are the different methods of hydrogen production ? Explain in brief.

(3×20=60 Marks)