



(Pages : 2)

E – 2999

Reg. No. :

Name :

**Sixth Semester B.Tech. Degree Examination, June 2018
(2008 Scheme)**

08.606.2 : NEW ENERGY SYSTEMS (MPU)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions. **Each** question in Part – **A** carries **4** marks :

1. What are the potential applications of MHD power source ?
2. What are the advantages and disadvantages of fuel cells ?
3. What are the consumer applications of photovoltaic effect ?
4. What is the theoretical energy required to create the plasma ?
5. What are the applications of solar liquid flat plate collectors ?
6. How does ocean receive thermal energy ?
7. Explain the principle of ocean thermal energy conversion.
8. What is hybrid power system ?
9. How are the biogas plant classified ?
10. List the applications of geothermal energy.

P.T.O.



PART – B

Answer **one full** question from **each** Module in Part – B. **Each** question in Part – B carries **20** marks :

Module – I

11. Write a short note on thermionic generator. What are the materials suitable for the construction of emitter and collector of the thermionic generator ?

OR

12. What are potential solar cell materials ? What are the problems with these materials for commercial use ?

Module – II

13. Explain the working of tidal power system with suitable sketch.

OR

14. Draw a suitable sketch and explain the working of ocean wave energy conversion system.

Module – III

15. How does power production from wind turbine take place ? Explain it with suitable sketch.

OR

16. How the methanol is obtained from biomass ? What are its energy applications ?
-