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A – 2703

Reg. No. :

Name :

**VI Semester B.Tech. Degree Examination, May 2016
(2013 Scheme)
13.606.9 : NEW ENERGY SYSTEMS (MP)**

Time : 3 Hours

Max. Marks : 100

Instruction : Answer all questions in Part – A.

PART – A

Each question carries 2 marks.

(2×10=20 Marks)

1. What are the challenges in conducting fusion reaction ?
2. Explain any one method of thermal storage.
3. What is solar-wind hybrid system ?
4. What is bio fouling in OTEC plants ?
5. Explain savonious type wind mill.
6. Explain dolphin type wave generator.
7. Explain the polarization of cells.
8. Explain solar collector tracking.
9. What are the merits of fuel cell ?
10. What are the advantages of renewable energy ?

P.T.O.



PART – B

Answer **any one full** question from **each** Module in Part – B**(4×20=80 Marks)****Module – 1**

11. Explain with neat sketch working Phosphoric Acid Fuel Cell (PAFC). **20**

OR

12. Explain with a neat sketch the construction and principle of solar photo voltaic cell showing performance curves. **20**

Module – 2

13. a) Compare and contrast fission and fusion reactions. **5**

b) Explain with sketch liquid metal cooled fast breeder reactor. **15**

OR

14. Explain different types of solar water heaters with merits and demerits of each type. **20**

Module – 3

15. a) Explain with sketch causes for variation of tide heights during lunar month. **10**

b) Explain any one method of tidal power generation. **10**

OR

16. Explain open cycle OTEC system and hybrid cycle OTEC plant. **20**

Module – 4

17. Explain the factors influencing the bio gas generation in a typical bio gas digester. **20**

OR

18. Explain different methods Hydrogen production storage and transportation. **20**
