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Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(Electronics & Electrical Engg.) (2012 to 2017 E-III)
B.Tech.(Electrical & Electronics Engg.) (2013 & Onwards E-III)
(Sem.-7)

NON-CONVENTIONAL ENERGY SOURCES

Subject Code : BTEEE-805D

M.Code : 71972

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Answer briefly :

1. Define Seebeck effect.
2. How can wind energy be converted into electrical energy?
3. State the advantages of the MHD power generation.
4. Give three types of solar energy collectors.
5. What are the constituents of biogas?
6. Classify the geothermal sources.
7. Differentiate between tide and wave.
8. What is solar cell?
9. Name at least three greenhouse gases responsible for global warming.
10. What are the merits and demerits of tidal power generation?



**SECTION-B**

11. With neat diagram explain the operation of wind power plant and mention the important parameters to be monitored in each block.
12. Explain the open cycle and closed cycle systems of magneto hydro dynamic power generation.
13. Explain the principle of conversion of solar energy into heat. What are the main components of a flat plate solar collector, explain the function of each?
14. What is geothermal energy? How can geothermal energy are utilized for electric power Generation?
15. Explain the various methods of tidal power generation.

SECTION-C

16. What is the principle of solar photovoltaic power generation? What are the main elements of a PV system?
17.
 - a) Explain briefly about the vertical wind mills with neat sketch?
 - b) Write short note on bio energy from agriculture waste.
18. Write short note on following :
 - a) Thermoelectric Generators
 - b) Gibb's Free Energy

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

