Reg. No. : | | | | | | | | | | |

Question Paper Code: 39033

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Elective

Electrical and Electronics Engineering

01UEE903 - NON-CONVENTIONAL ENERGY RESOURCES

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. State the renewable energy scenario in India.
2. List out the applications of renewable energy.
3. What is solar cell?
4. What is solar cooling techniques?
5. List out the safety and environment aspects of wind energy.
6. Define wind power.
7. What is bio-mass?
8. What is bio-mass conversion technology?
9. List out geothermal energy sources.
10. Draw block diagram of small hydro power plants.

PART - B (5 x 16 = 80 Marks)

11. (a) Explain various types of renewable energy sources. (16)

Or

(b) Describe the environment aspects of various renewable energy sources. (16)

12. (a) Explain various types of flat plate solar collectors. (16)

Or

(b) Explain solar photovoltaic conversion system. (16)

13. (a) With diagram explain construction and working of horizontal axis wind turbine. (16)

Or

(b) Describe and drive wind data and energy estimation. (16)

14. (a) With diagram explain working of two stage digestion process. (16)

Or

(b) Describe with block diagram from wood by acid hydrolysis. (16)

15. (a) Explain open cycle OTEC system. (16)

Or

(b) Describe the arrangement of small hydro power station. (16)

———————