

B.A. / B.Com.- I (NEP) Semester-II
**BSC2OB12 - Electronics - Open Elective - Renewable Energy and Energy
Harvesting**

P. Pages : 1

Time : Two Hours



GUG/S/25/16531

Max. Marks : 40

-
- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and well-labelled diagrams wherever necessary.

1. a) What is fossil fuel? How does it get obtained? State its disadvantages. 8
- OR**
- b) Explain the need of renewable energy. 8
2. a) Explain the concept of solar energy and its importance. 8
- OR**
- b) Explain the working of Solar Water heater. State its advantages. 8
3. a) Explain the fundamentals of wind energy and mechanism of wind turbine. 8
- OR**
- b) State the different electrical machine in wind turbines and explain. 8
4. a) Explain Ocean energy potential against wind and solar. 8
- OR**
- b) Explain 8
- i) Wave Attenuator ii) Point Absorber.
5. Attempt **any eight** of the followings: 1x8
=8
- a) What is nuclear energy?
- b) What are non-conventional energy sources?
- c) What is geothermal energy?
- d) What is solar energy?
- e) State the advantage of solar cell.
- f) What is solar pond?
- g) What is wind energy?
- h) State the disadvantage of wind energy.
- i) State the name of generator used in wind turbine.
- j) What is wind wave in ocean?
- k) What is Tidal wave?
- l) What is the function of wave attenuator?
