

Roll No.

Total No. of Questions : 7]
(2034)

[Total No. of Printed Pages : 3

UG (CBCS) IIIrd Year Annual Examination
3005

B.Sc. PHYSICS

(Renewable Energy and Energy Harvesting)

(SEC-4)

Paper : PHYS 310 TH

Time : 3 Hours]

[Maximum Marks : 50

Note :- Attempt any *five* questions. All questions carry equal marks.

1. (a) Discuss in detail the energy scenario in India.
(b) Explain the non-conventional sources of energy. 5,5
2. (a) What is a Solar Cooker ? Explain the types of solar cookers.
(b) What do you mean by Solar Energy ? Discuss advantages and disadvantages of solar energy. 5,5

CH-305

(1)

Turn Over

3. State the principle of wind turbine. Explain its components along with working. 10

4. Write short notes on the following :

(i) Green Power

(ii) Nuclear Energy

(iii) Tidal Barrage

(iv) Sun Tracking System

(v) OCTEC 2×5=10

5. What is Osmotic Power ? Explain different mechanisms to harness it. 10

6. (a) Discuss the mechanisms of Geothermal System.

Explain briefly the Geothermal Technologies.

(b) Define Hydro Power. Discuss the environmental impacts of hydroelectric power. 5,5

7. (a) What is Piezoelectric Energy ? Discuss cantilever type piezoelectric energy harvesters.

(b) What is Electromagnetic Energy ? How can it be harvested ?

5,5