

**DAYANANDA SAGAR COLLEGE OF ENGINEERING***(An Autonomous Institute Affiliated to VTU, Belagavi)*

Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru-560078

**UG Semester End Examination****Model QP-TEMPLATE**Course: **Renewable Energy Sources**Course Code: **IEEE76/IEAU76**Semester: **VII**Maximum marks: **100**Duration: **3 hours**

Maximum of 4 sub questions are allowed

		<b>Marks</b>
1	1. Solar radiations can be converted to Electricity by _____ 2. Heating effect of solar radiations called as _____ 3. Wind, solar and hydro energy sources are called as _____ 4. Device which converts wind to electricity is _____ 5. Defused solar radiations means _____ 6. Direct solar radiations means _____ 7. The component of solar radiation responsible for heat is _____ 8. Thermal power plant converts _____ to electricity 9. _____ Energy of water is used for generation of electricity 10. The place Raichur, Karnataka is well known for _____ power plant 11. The best storage device for electricity is _____ 12. Bio-Gas can be produced from _____ 13. The place, Shivana samudra is well known for _____ power plant. 14. What energy of ocean is used to convert electricity?  <b><i>(Total 20 questions of 1 mark each from all the 5 units will be asked)</i></b>	1 x 20
2	(a) List out and describe the different types of energy sources available in nature (b) Describe the Advantages and Applications of solar energy	08  08
3	(a) With a neat sketch describe the basic working principle of Solar Cell or Photovoltaic Cell (b) List out the Advantages and Disadvantages of Vertical axis and Horizontal axis wind energy conversion machines	08  08
4	(a) Classify the Bio-Gas plants and explain any two types. (b) Briefly discuss about the Advantages and Limitations of Bio-Gas power plant	08 08
5	(a) Briefly discuss about the main components of Tidal power plant (b) Briefly discuss about the Advantages and Disadvantages of Tidal power plant	08 08

	<b>(OR)</b>	
	(a) With the help of a block diagram explain the Hybrid type of Ocean Thermal Energy power generation	08
	(b) Describe the comparison between Tidal power plant and OTEC system in the view of energy conversion	08
6	(a) Briefly discuss about the construction and working of Fuel Cell	08
	(b) Write a short note on Conversion of Hydrogen into Electricity and its applications	08
	<b>(OR)</b>	
	(a) With block diagram explain the concept of wave energy	08
	(b) List out the Benefits of Battery Energy Storage Systems	08

\*\*\*\*\***Model Question paper**\*\*\*\*\*

Model Question Paper