

- Q.28 Describe the working of Evacuated tube type solar water heater.
- Q.29 List the raw materials available for biogas production.
- Q.30 Explain the criteria for site selection of wind mill.
- Q.31 Describe the concentrating type collector.
- Q.32 Explain the constructional detail of a solar dryer.
- Q.33 What is the scope of renewable energy sources in India?
- Q.34 Explain the working principle of SPV module.
- Q.35 Give the classification of wind mills.

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain the principle and constructional detail of a Floating holder type biogas plant.
- Q.37 What is the scope of energy conservation in India. Give suggestions to minimize the wastage and conservation of energy.
- Q.38 Describe the principle, operation and constructional detail of a box type solar cooker.

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**4th Sem / Agri**

**Subject:- Renewable Source of Energy/ Non-conv  
Engy. Resources**

Time : 3Hrs.

M.M. : 100

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Which of these is a non renewable source of energy.
- |            |          |
|------------|----------|
| a) Biomass | b) Solar |
| c) Wind    | d) Coal  |
- Q.2 Horizontal axis and vertical axis are the types of:
- |                    |               |
|--------------------|---------------|
| a) Nuclear reactor | b) Wind mills |
| c) biogas reactor  | d) Solar cell |
- Q.3 The major constituent of biogas is
- |           |            |
|-----------|------------|
| a) Butane | b) Methane |
| c) Ethane | d) Propane |
- Q.4 The thermal energy present in the interior of earth is
- |                  |                      |
|------------------|----------------------|
| a) Geothermal    | b) Nuclear           |
| c) Biogas energy | d) None of the above |
- Q.5 Which renewable source generate maximum power in India

- a) Wind                              b) Biomass  
c) Geothermal                      d) Solar
- Q.6 Photovoltaic cell convert solar energy into  
a) Chemical                      b) Electric  
c) Mechanical                      d) Heat
- Q.7 Hydropower plants are located in  
a) Hilly Areas                      b) Desert area  
c) Plains                              d) None of these
- Q.8 Which is the application of biogas plants?  
a) Lamps                              b) Burner  
c) Heating plate                      d) All of these
- Q.9 Solar cells are made up of  
a) Silicon                              b) Silver  
c) Aluminium                      d) Germanium
- Q.10 Windmill/ Turbine harness energy in the form of \_\_\_\_\_.  
a) Heat                              b) Electrical  
c) Solar                              d) Mechanical

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 List two conventional sources of energy.

- Q.12 What is full form of SPV?  
Q.13 Define Farm Residue.  
Q.14 Define Feed Stock.  
Q.15 Define gasification.  
Q.16 Name two energy conservation devices.  
Q.17 List two govt. agencies involved in promotion of renewable energy sources.  
Q.18 Define solar pond.  
Q.19 Write two applications of biogas.  
Q.20 Define anaerobic digestion.

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Describe the different appliances of biogas plants.  
Q.22 Explain the procedure for site selection of biogas plants.  
Q.23 What is necessity of alternate energy sources.  
Q.24 List various applications of solar energy.  
Q.25 Describe the principle of thermal collection and storage.  
Q.26 What is the scope of wind energy?  
Q.27 Explain Biogas in detail?