

Q.22 Discuss wind energy potential scenario in India.  
(CO3)

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 What is the basic principle of tidal power? Also write down advantages and limitations of tidal power plant. (CO4)

Q.24 Discuss about principle and constructional details of fixed dome type biogas plant with suitable diagram. (CO2)

Q.25 What is the scope of energy conservation in domestic, commercial and agricultural sector? Also suggest any four methods of conserve energy. (CO1)

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### 5th Sem / Agriculture

**Subject : Renewable Energy Sources in Agriculture Engineering**

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 The gas holder used in floating type biogas plant is:  
(CO2)

- a) Conical
- b) Spherical
- c) Inverted drum
- d) None of these

Q.2 Hydropower plants are located in (CO3)

- a) Hilly areas
- b) Desert area
- c) Plains
- d) Deltas

Q.3 An instrument used to measure the wind speed is called (CO3)

- a) Dynamometer
- b) Hygrometer
- c) Anemometer
- d) Thermometer

- Q.4 Biomass can be converted to \_\_\_\_\_. (CO2)  
 a) Methane gas                      b) Bio-diesel  
 c) Ethanol                              d) All of these
- Q.5 Geothermal energy is the thermal energy present \_\_\_\_\_. (CO4)  
 a) On the surface of earth  
 b) On the surface of ocean  
 c) In the interior of earth  
 d) None of these
- Q.6 Which renewable source generates maximum power in India? (CO5)  
 a) Wind                                      b) Geothermal  
 c) Biomass                                  d) Solar

### SECTION-B

- Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)
- Q.7 Write any two example of non-conventional energy sources. (CO2)
- Q.8 Full form of KVIC. (CO3)
- Q.9 Photovoltaic solar cells are made up of \_\_\_\_\_. (CO1)
- Q.10 Enlist raw materials required for biogas generation. (CO2)

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- Q.11 Write name of any scheme for promotion of use of renewable sources of energy. (CO5)
- Q.12 Expand WECS. (CO3)

### SECTION-C

- Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)
- Q.13 What are the basic principles of wind energy conversion system? (CO3)
- Q.14 Enlist safety measures in Bio-gas plant. (CO2)
- Q.15 Differentiate between renewable and non-renewable sources of energy. (CO1)
- Q.16 What type of data required for installation of a wind mill? (CO3)
- Q.17 What is geothermal energy? Also write down its applications. (CO4)
- Q.18 Write down applications of SPV module. (CO5)
- Q.19 Enlist different types of furnaces used for biomass combustion. Also make sketch any one of them. (CO2)
- Q.20 Discuss about various factors / parameters affecting the biogas production. (CO2)
- Q.21 What are the necessities of alternate energy sources? (CO5)

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