

- Q.29 What are the applications of photo voltaic cells?  
(CO2)
- Q.30 Explain fermentation process of biogas generation.  
(CO4)
- Q.31 What is wind mill explain horizontal axis wind mill.  
(CO5)
- Q.32 Classify geothermal sources. (CO6)
- Q.33 Explain in brief solar furnace. (CO2)
- Q.34 State advantages of fuel cell. (CO7)
- Q.35 Describe working of solar cooker. (CO2)

### SECTION-D

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

- Q.36 What is fuel cell explain construction working and application of fuel cell. (CO7)
- Q.37 Explain with diagram construction working and silent features of photovoltaic cell. (CO2)
- Q.38 What is Biogas? Explain various methods of obtaining biogas energy from biomass. (CO4)

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### 5th Sem / Branch : Electrical Sub.: Non Conventional Energy Sources

Time : 3Hrs.

M.M. : 100

### SECTION-A

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

- Q.1 The disadvantage of renewable source is (CO1)  
a) Low efficiency      b) Semiconductors  
c) Heat      d) Radio active
- Q.2 A solar cell is made of silicon (CO2)  
a) True      b) False  
c) Both      d) None of above
- Q.3 Biogas is \_\_\_\_\_ Gas. (CO3)  
a) Hygenic      b) Anerobic  
c) Inflemmable      d) Flammable
- Q.4 Th wind velocity with altitude (CO4)  
a) Decrease      b) Increase  
c) Both      d) None of these
- Q.5 Tidal Power generations is free from pollution(CO5)  
a) True      b) False  
c) Both A & B      d) None of these

Q.6 Working fluid used In closed cycle otec system (CO5)

- a) Ammonia                      b) Hydrogen
- c) CO                              d) Oxygen

Q.7 Magma source is exmple of geo thermal source (CO5)

- a) True                              b) False
- c) Heat                              d) None of these

Q.8 Wind turbine is of \_\_\_\_\_ types. (CO4)

- a) 2                                      b) 3
- c) 4                                      d) 6

Q.9 Solar cell is also called (CO2)

- a) Energy cell                      b) Photovoltaic cell
- c) Fuel cell                              d) None

Q.10 Fuel cell is also called (CO3)

- a) Hydrogen fuel cell      b) Oxygen cell
- c) Caron fuel cell              d) Sulpur cell

### SECTION-B

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

Q.11 Expand MHD. (CO7)

Q.12 Generating capacity of mini hydro plant is \_\_\_\_\_. (CO8)

Q.13 Theoratical efficiency of fuel cell is \_\_\_\_\_ (CO7)

Q.14 Write primary source of energy. (CO1)

Q.15 What is solar cell? (CO2)

Q.16 Expand Hawt. (CO5)

Q.17 Compare fuel cell with battery. (CO7)

Q.18 Bio gas is \_\_\_\_\_ than air. (CO3)

Q.19 Draw the symbol of solar cell. (CO2)

Q.20 What are gassifiers? (CO3)

### SECTION-C

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

Q.21 Compare conventional and non conventional source of energy. (CO1)

Q.22 Explain flat plate solar collector. (CO2)

Q.23 What is anaerobic process used for biomass. (CO3)

Q.24 What re the Basic components of wind energy conversion system? (CO4)

Q.25 Explain closed cycles system otec. (CO5)

Q.26 What is conversion efficiency of fuel cell? (CO7)

Q.27 Explain open cycle MHD sytem. (CO6)

Q.28 What are impoundment type and diversion type hydro power plant. (CO8)