Q.21 Describe the working of MHD power generation system? (CO2)

Q.22 Give four differences between battery and fuel cell? (Co5)

## SECTION-D

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

Q.23 Classify and explain various resources of energy? (CO1)

Q.24 Explain the wet process of biomass conversion method. (CO2)

Q.25 Explain the various ocean thermal energy conversion cycles. (CO3)



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**2nd Sem / Electrical**

**Subject : Non Conventional Sources of Energy**

Time : 3 Hrs. M.M. : 60

## SECTION-A

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

Q.1 Which of the following is a disadvantage of solar power? (CO1)

a) High initial installation cost

b) Limited availability in certain geographic locations

c) Intermittent energy production due to weather conditions

d) All of the above

Q.2 Which of the following is the largest conventional source of energy? (CO1)

a) Coal

b) Natural Gas

c) Nuclear Power

d) Hydroelectric Power

Q.3 The term hydro energy most often refers to_____ (CO3)

a) Energy generated from ocean waves

b) Energy produced from tidal movements

c) Electricity generated from flowing water

d) Heat extracted from geothermal reservoirs

Q.4 Which of the following components is essential in a wind energy conversion system? (CO4)

a) Photovoltaic panels b) Steam turbine

c) Wind turbine d) Diesel generator

Q.5 Which of the following is a form of ocean energy conversion? (CO3)

a) Solar power b) Wind power

c) Tidal power d) Geothermal power

Q.6 Which of the following is a method of energy storage? (CO5)

a) Wind turbines b) Battery systems

c) Solar panel d) Nuclear reactors

## SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 The sun's energy can be converted into electricity through _____ modules. (CO3)



Q.8 Solar cell is made of_____ (CO1)

Q.9 A_____ is defined as machine that converts the kinetic energy of wind into mechanical energy. (CO2)

Q.10 OTEC stand for_____

Q.11 Fuel cell converts_____ energy in to electrical energy. (CO1)

Q.12 SMES stands for_____ (CO1)

## SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 What are primary and secondary energy resources? (CO1)

Q.14 Describe the working of solar furnace with neat diagram. (CO2)

Q.15 Write a short note on : (Co3)

a) Pyrolysis b) Liquefication

Q.16 Define Biogas and its composition? (CO4)

Q.17 Compare the mini and micro hydro power plant. (CO5)

Q.18 Classify wind power plant? (CO1)

Q.19 Write the 4 merits of wind power plant? (CO3)

Q.20 Write a short note on geothermal energy? (CO1)