

6th Sem.
Branch :Instrumentation & Control
Sub. : Energy Management

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

- Q.1 A solar panel converts _____ energy into electricity.
a) Light b) Chemical
c) Hydraulic d) Kinetic
- Q.2 MHD refers to
a) Magneto - hydro dynamic converter
b) Magneto - hydrogen dynamic converter
c) Multi - hydro dynamic converter
d) Both A & B
- Q.3 A secondary battery is a battery
a) Non-Rechargeable b) Rechargeable
c) Silver - Acid battery d) Mechanical
- Q.4 Ocean energy source is a
a) Non-Renewable energy b) Thermal energy source
c) Renewable energy d) None of the above

- Q.5 Which of the following is not the unit of energy?
a) Joule b) Watt-hour
c) Erg d) Watt
- Q.6 A turbine is used in which of the following energy system?
a) Geo-thermal b) Battery
c) Ocean d) Hydro power

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. $(6 \times 1 = 6)$

- Q.7 Expand MPPT.
- Q.8 Define renewable energy.
- Q.9 Write any two examples of renewable energy.
- Q.10 What is secondary battery?
- Q.11 MHD is an example of non renewable energy. (True/False)
- Q.12 What is load factor?

SECTION-C

Note: Short answer type Questions. Attempt any eight questions out of ten Questions. $(8 \times 4 = 32)$

- Q.13 What are the different source of renewable energy?
- Q.14 What are the uses of energy efficient technology in domestic and industrial sector?

- Q.15 Explain the working principle of hydrogen energy system.
- Q.16 Write any four energy audit instruments.
- Q.17 How energy is obtained from solar panel?
- Q.18 What are the advantages of renewable energy?
- Q.19 Explain fuel cells with diagram.
- Q.20 Explain the concept of MPPT.
- Q.21 What are the difference between renewable and non-renewable energy?
- Q.22 Explain Geo-Thermal energy source.

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. $(2 \times 8 = 16)$

- Q.23 Define energy and its source. What are the types of energy source? Write their advantages and disadvantages.
- Q.24 Explain with diagram.
a) Tidal energy b) MHD
- Q.25 Define energy audit. What is the need of it? What are the methods for preliminary and detailed energy audit.