

- Q25 What are the advantages of power factor improvements.
(CO3)
- Q.26 What do you mean by energy conservation? Why it is required and how it can be done. (CO3)
- Q.27 What is the need of energy efficient devices. (CO3)
- Q.28 Compares the fuel cell with the battery. Mention advantages of fuel cell? (CO1)
- Q.29 What are the important characteristics of fuel cell. How they differ from conventional cell. (CO4)
- Q.30 Writes a short note on detailed energy Audit. (CO3)
- Q.31 Explain in brief energy Audit procedure. (CO3)
- Q.32 How we can store wind energy? (CO2)
- Q.33 Describe the prospects of non-conventional energy resources. (CO1)
- Q.34 What is Gaisfier? Write down its applications. (CO2)
- Q.35 Describe the limitation of non-conventional resources of energy. (CO1)

Section-D

- Note: Long answer questions. Attempt any two question out of three Questions. (2x10=20)**
- Q.36 Explain worked principle construction and application of fuel cell. (CO4)
- Q.37 Explain with neat diagram a wind energy conversion system. (CO2)
- Q.38 Describe the photo voltaic cell with neat diagram. (CO2)

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4th Sem.

Branc : IC, Elect, Power Station Engg., Elect & Eltx. Engg.
Subject : Principles of Energy Management/Energy Sources & Mgmt of Elect. Energy

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

- Q.1 OTEC system is also called- (CO2)
- Anaderson cycle system
 - Open cycle system
 - Claude cycle system
 - None
- Q.2 The output of MHD is - (CO2)
- AC
 - DC
 - Both AC & DC
 - None
- Q.3 Primary source of Energy (CO1)
- Wood
 - Wind
 - Lakes
 - All of these
- Q.4 Which turbine rotates parallel to the direction of wind- (CO2)
- HAWT
 - VAWT
 - Darrieus
 - None of these

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- Q.5 Complete combustion of biomass to ashes is called (CO2)
- a) Pyrolysis b) Incineration
c) Fermentation d) None of these
- Q.6 Earth outer layer of rocks is called- (CO1)
- a) Mantle b) Crust
c) Outer core d) None of these
- Q.7 Which of the following is ultimate source of energy (CO1)
- a) Water b) Sun
c) Uranium d) None of these
- Q.8 On which principle wind mill works- (CO2)
- a) Electromagnetic Induction
b) Momentum
c) Both A & B
d) None of these
- Q.9 What is the output of H_2O_2 fuel cell in volt? (CO4)
- a) -1.23 b) -1.45
c) -1.01 d) -0.93
- Q.10 Different types of tariff. (CO3)
- a) Flat rate tariff b) Step rate tariff
c) Block rate tariff d) All of the above

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Section-B

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

- Q.11 Practical energy of fuel cell is _____ (CO4)
- Q.12 Define about bio-gas? (CO2)
- Q.13 What is secondary energy. (CO1)
- Q.14 What is the full form of MHD? (CO2)
- Q.15 What is OTEC? (CO2)
- Q.16 Wind energy is renewable energy sources (True/False) (CO1)
- Q.17 What is SI unit of energy. (CO1)
- Q.18 Write the full form of MPPT? (CO2)
- Q.19 What do you understand by the term domestic sector. (CO3)
- Q.20 Full form of ECBC is _____. (CO3)

Section-C

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

- Q.21 Discuss about various conventional resources of energy. (CO1)
- Q.22 Explain the working of solar water heater. (CO2)
- Q.23 Explain the working of a solar cell. (CO2)
- Q.24 Discuss the principle of MHD generation. (CO2)

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