

- Q.25 What is Gasifier? Explain it. (CO-2)
 Q.26 Draw and explain the basic components of wind energy conversion system. (CO-2)
 Q.27 Explain how biomass conversion takes place.(CO-2)
 Q.28 Differentiate between Geothermal & Tidal energy. (CO-2)
 Q.29 What are the different methods of improving power factor? Explain anyone. (CO-3)
 Q.30 Define Real power, apparent power and Reactive power. (CO-3)
 Q.31 What are the different types of tariff? Explain about anyone. (CO-3)
 Q.32 Write a short note on Energy conservation ACT-2001. (CO-3)
 Q.33 Explain about the energy efficient motors. (CO-1)
 Q.34 Enlist the five application of fuel cell. (CO-4)
 Q.35 What are the advantages of Energy Audit. (CO-5)

SECTION-D

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

- Q.36 Write type of fuel cell? Discuss the construction and working of fuel cell. (CO-4)
 Q.37 Explain the working of Ocean thermal energy generation. (CO-2)
 Q.38 Define solar energy & explain the principle of conversion of solar radiation in the heat with neat sketch. (CO-2)

(Note: Course outcome/CO is for office use only)

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Roll No.

4th Sem / IC, Elect, Power Station Engg., Elect & Eltx. Engg.

**Subject:- Principles of Energy Management/
Energy sources & Mgmt of Elect. Energy**

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 Which is not a renewable energy sources- (CO-1)
 a) Hydro power b) Tidal power
 c) Solar power d) Nuclear power
 Q.2 Which of the following power plant has highest share of capacity- (CO-1)
 a) Hydro plant b) Coal plant
 c) Nuclear plant d) Gas plant
 Q.3 Geo thermal energy present in- (CO-2)
 a) Inside earth
 b) On the surface of ocean
 c) On the surface of earth
 d) None
 Q.4 World energy consumption needs are rising due to- (CO-3)
 a) Deforestation
 b) Increasing population
 c) Inflation
 d) None

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- Q.5 Material used for solar cell- (CO-2)
 a) Germanium b) Silicon
 c) Silver d) None
- Q.6 Energy conservation act established in India- (CO-3)
 a) 2000 b) 2001
 c) 2002 d) 2005
- Q.7 Detailed Audit is also called- (CO-5)
 a) General audit b) Screening audit
 c) Sid energy audit d) Both a & b
- Q.8 The performance of distribution transformer is judge by its- (CO-3)
 a) Commercial efficiency
 b) All day efficiency
 c) Distribution efficiency
 d) None of the above
- Q.9 Different types of tariff- (CO-3)
 a) Flat rate tariff b) Step rate tariff
 c) Block rate tariff d) None of the above
- Q.10 Which of the following is important feature of energy conservation act- (CO-3)
 a) Standard & labeling
 b) Designated consumer
 c) Energy conservation building code
 d) All of the above

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- ### SECTION-B
- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 What do you mean by mini-Audit. (CO-5)
- Q.12 What is the full form of MMC in tariff structure. (CO-3)
- Q.13 How we can correct the power factor. (CO-3)
- Q.14 Practical efficiency of a fuel cell is _____. (CO-4)
- Q.15 Define Turbine? (CO-2)
- Q.16 Name any two vertical axis wind turbine. (CO-2)
- Q.17 Motor converts _____ energy into mechanical energy. (CO-4)
- Q.18 What do you mean by primary energy. (CO-1)
- Q.19 WECS stands for _____ (CO-2)
- Q.20 Write full form of HAWT _____ (CO-2)

- ### SECTION-C
- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Define primary and secondary energy with examples. (CO-1)
- Q.22 What are the non-conventional resources of energy? Explain it. (CO-1)
- Q.23 Explain how biomass conversion takes place. (CO-2)
- Q.24 Explain the working of solar water heater? (CO-2)

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