

- 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)

No. of Printed Pages : 4

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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

- 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 be 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 is 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 take place. (CO-2)
- Q.24 Explain the working of solar water heater? (CO-2)

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