

- Q.25 Discuss the construction of LED.
  - Q.26 Write the advantages of life cycle cost analysis.
  - Q.27 Write the different factors while determining the optimum cable size for distribution system.
  - Q.28 Define power factor and its role.
  - Q.29 Mention the advantages of using static capacitors for power factor correction.
  - Q.30 Differentiate between standard efficiency motor and energy efficient motor.
  - Q.31 Discuss the different energy audit methodology.
  - Q.32 Write a short note on monitoring system in energy audit.
  - Q.33 Explain the three pronged approach to reduce the specific energy consumption.
  - Q.34 Define the term EIA and explain its history.
  - Q.35 Give the standard format for EIA and its completion.

## **SECTION-D**

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

- Q.36 Explain the need for energy conservation with brief description of oil and coal crisis.

Q.37 Explain the construction and design characteristics of energy efficient motors.

Q.38 Prepare the energy Audit report of the any manufacturing Industry.

No. of Printed Pages : 4  
Roll No. ....

120965A/030965A

# **6th Sem / Branch : Elect. Power Station Engg. Sub.: Energy Management**

Time : 3Hrs.

M.M. : 100

## **SECTION-A**

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

- Q.1 What are the reasons for energy conservation?

  - a) The demand of energy is increasing day by day due to industrialization.
  - b) Fossil fuels are non renewable
  - c) Conservation of energy reduces air pollution
  - d) All of the above

Q.2 Which rating is provided by the BEE displayed on electrical home appliances to indicate their energy efficiency?

  - a) BIS
  - b) ISI
  - c) Star labeling
  - d) None of the above

Q.3 Which of the following generated more light for same voltage

  - a) Incandescent bulb
  - b) Conventional tube light
  - c) CFL
  - d) LED

- Q.4 First step in the energy Audit process  
 a) Initial meeting      b) Prepare report  
 c) Site inspection      d) None of the above
- Q.5 The environmental impact assessment in India was started in which of the following years?  
 a) 1975-76      b) 1976-77  
 c) 1977-78      d) None of the above
- Q.6 The three pronged approach to reduce specific energy consumption are  
 a) Fine tuning, energy efficiency capacity utilization  
 b) Capacity utilization power factor technical upgradtion  
 c) Fine tuning, capacity utilization, technical upgradtion  
 d) None of the above
- Q.7 Amorphous core is now used in the manufacturing of  
 a) Induction motors  
 b) Energy efficient transformers  
 c) Pump set.  
 d) None of the above
- Q.8 The losses which not occur but are taking place in a system are called  
 a) Avoidable losses      b) Unavoidable losses  
 c) Hysteresis losses      d) Eddy current losses
- Q.9 The factor which influence the location of capacitors in a plant are  
 a) Types of motors      b) Load factor  
 c) Load distribution      d) All of the above

- Q.10 EIA is an environmental impacts  
 a) Beneficial and adverse  
 b) Social and benefit  
 c) Adverse and economical  
 d) None of above

## **SECTION-B**

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

- Q.11 Define energy management.  
 Q.12 Define energy efficiency.  
 Q.13 LCD stands for  
 Q.14 Expand full form of BIS.  
 Q.15 Expand full form of EIA.  
 Q.16 Efficiency of light source is measured in \_\_\_\_\_.  
 Q.17 Write any one role of voltage on efficiency.  
 Q.18 Write the meaning of fine tunning of equipment.  
 Q.19 Define specific energy consumption.  
 Q.20 Write any one losses in energy efficient motor

## **SECTION-C**

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

- Q.21 Discuss the importance of Energy management.  
 Q.22 Discuss the scope of energy conservation in industrial lighting.  
 Q.23 Write a short note on alternative sources of energy.  
 Q.24 Explain how the energy conservation is done in Diesel-generating sets.