Q.25 Explain the three pronged approach to reduce the specific energy consumption.

Q.26 Discuss the term technology upgradation.

Q.27 Compare the merits and demerits of LCD, LED, CFL.

Q.28 Compare the energy efficient motors with standard motors.

Q.29 Discuss the role of voltage on efficiency.

Q.30 Explain the role of power factor in Distribution system.

Q.31 Write about the design characteristics of energy efficient motor.

Q.32 Discuss the BIS standards for energy efficient motors.

Q.33 Explain, how calculate the size of shunt capacitor.

Q.34 Write a short note on amorphous core transformer.

Q.35 Discuss the need of environment impact assessment.

Section D

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

Q.36 Explain in detail, how the energy conservation can be done in industrial sector and agriculture sector.

Q.37 Draw and explain the construction of LED and CFL.

Q.38 Discuss in brief various energy audit strategies and methods.

Roll No.....

Branch : Electrical Engg.

Subject : Energy Management

Time : 3 Hrs. **M.M. : 100**

SECTION-A

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

Q.1 The objective of Energy Management includes.

a) Minimizing energy costs
b) Minimizing waste
c) Minimizing environmental degradation
d) All the above

Q.2 B.E.E. stands for

a) Board of energy efficiency.
b) Bureau of energy efficiency.
c) Branch of energy efficiency.
d) None of these

Q.3 Which is the major energy source to meet the Indian energy demand?

a) Coal b0 Oil
c) Natural gas d) Lignite

Q.4 Which of the following is the more energy efficient device.

a) Incandescent b) Fluorescent tube light
c) CFL d) None of these

Q.5 An inspection survey and an analysis of energy follow for energy conservation in a building is called as

a) Energy Audit b) Energy management
c) Energy conservation d) None of these

Q.6 Which of the following techniques used for energy conservation in induction motor?

a) by improving power quality
b) by motor survey
c) by matching motor
d) All of the above

Q.7 EIA was introduced in India in _____

a) 1978 b) 1976
c) 1879 d) 1789

Q.8 Energy efficient transformer core is made up of _____.

a) Silicon alloyed iron (grain oriented)
b) Copper
c) Amorphous core metallic glass alloy
d) None of the above

Q.9 Which of the following is not part of energy monitoring.

a) data recording
b) data analysis
c) data reporting
d) energy efficiency equipment financing

Q.10 When the voltage is above the normal voltage then efficiency of the system is

a) Rise b) fall
c) Constant d) None of the above

Section B

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

Q.11 Define safety margins.

Q.12 Purpose of Energy audit is to _____ specific energy Consumption.

Q.13 A LED gives _____ light that a CFL.

Q.14 Define Energy crisis.

Q.15 Enlist the three pronged approach to reduce specific Energy consumtion.

Q.16 Define Detailed Audit.

Q.17 Define Energy conservation.

Q.18 Define fine turning of equipment.

Q.19 Define avoidable losses.

Q.20 Expand the full form of EIA.

Section C

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

Q.21 Write a short note on global coal and oil crisis.

Q.22 Define energy efficiency and give its significance.

Q.23 Explain, how energy conservation can be done while using domestic appliances.

Q.24 Write a short note on monitoring system in energy audit.