Register No.:

1837

October 2024

Time – Three hours
(Maximum Marks: 100)

[N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.

2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART – A

1. Give the benefits of star labelling.

2. What is meant by secondary energy? Give an example.

3. What is meant by rewinding of motor?

4. List out the advantages of energy efficient transformers.

5. Write the remedies adopted for commercial losses.

6. Write a note on electronic regulators.

7. List out the needs of energy audit.

8. State any three instruments used in energy audit procedure with their functions.

9. Draw the topping cycle of co-generation system.

10. Mention any three types of tariff.

[Turn over.....

PART – B

11. (a) Explain about the safety rules for working with electrical equipments.

(Or)

(b) Discuss about the various energy conservation techniques.

12. (a) Explain the energy conservation techniques to be adopted to reduce losses in induction motor.

(Or)

(b) Discuss how load sharing and parallel operation are used to conserve energy of a transformer.

13. (a) Discuss about optimizing distribution voltage to reduce technical losses.

(Or)

(b) Write notes on (i) maximum demand controller (ii) KVAR controller.

14. (a) Explain how energy audit is carried out in HVAC system and water heating system.

(Or)

(b) Discuss about the basic measurements in energy audit.

15. (a) Discuss about energy audit report format.

(Or)

(b) Write the classification of co-generation systems based on technology. Explain any two.
