Register No.:

295

April 2023

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. Classify substations.
2. Compare radial and ring distribution system.
3. Mention any one application area of group drive system.
4. What are the features of good braking system?
5. Define Average speed of Electric Train.
6. State the types of Traction Systems.
7. Mention the power ratings of CFL.
8. What are the factors to be considered while designing good lighting system?
9. Write notes on power supply to arc furnaces.
10. What are the advantages of electric heating?

[Turn over.....

PART – B

11. (a) Classify the distribution systems based on types of supply, character of service, type of construction.

(Or)

(b) Explain various types of substations.

12. (a) Explain Load duty cycles. How a motor is selected from a given duty cycles?

(Or)

(b) Explain the necessary Mechanical characteristics needed for the selection of motor.

13. (a) Write short notes on Booster transformer connection in Electric Traction and Neutral sectioning.

(Or)

(b) Explain about the Magnetic Levitation in electric traction.

14. (a) State and explain the laws of Illumination.

(Or)

(b) Explain with a sketch the working of induction lamp.

15. (a) Draw and explain direct and indirect arc furnaces with suitable sketches.

(Or)

(b) Explain electron beam welding with neat sketch.
