845 Register No.:

November 2022

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. What is magnetic flux? Mention the unit of magnetic flux.
2. Define Flux Density. Mention the unit of Flux Density.
3. Define Average value of sine wave.
4. Draw a neat diagram of DOL starter.
5. Define Brushless servo motor. Mention their applications.
6. Define BLDC servo drive.
7. What is the need for filter?
8. What is meant by ELCB?
9. Define Logic Gate.
10. Draw a ladder diagram for two input OR logic.

[Turn over.....

PART – B

11. (a) Explain the working principle of DC generator with neat diagram.

(Or)

(b) Draw and explain four point starter with neat sketches.

12. (a) Explain with neat diagram construction details of Transformer.

(Or)

(b) Explain the working principle of squirrel cage induction motor with neat sketch.

13. (a) Explain with neat diagram working principle of AC servo motor.

(Or)

(b) (i) Write short notes on stepper motor and their applications. (7)

(ii) What is meant by Individual drive? Write the advantages and disadvantages of individual drive. (7)

14. (a) Explain with neat diagram construction and working principle of Bridge rectifier.

(Or)

(b) Explain the working principle of solenoid type contactor.

15. (a) Explain with neat block diagram of PLC scan.

(Or)

(b) Explain the details of memory available in PLC.
