983 Register No.:

April 2019

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B

(2) Answer division (a) or division (b) of each question in PART – C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and 10 marks in PART – C.]

PART – A

1. State Ohm's law.
2. What is frequency? What is power?
3. Name the starters used in 3ϕ induction motor.
4. What is group drive?
5. What is electric shock?
6. What is fuse?
7. Expand ELCB.
8. Define SMPS.

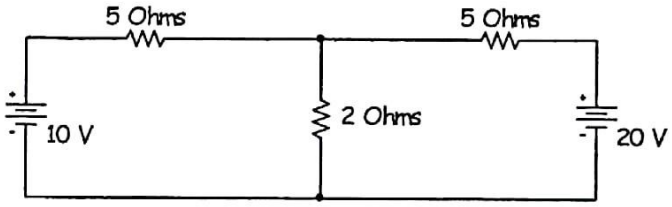
PART – B

9. State Faradays law's of electromagnetic induction.
10. What is MMF and reluctance?
11. Define the efficiency of transformer with an equation.
12. What is the necessity of starters?
13. What is earthing?
14. Write short notes on limit switch.
15. What is NO and NC contact?
16. What is positive and negative logic?

[Turn over.....

PART – C

17. (a) Find the current flowing through 2Ω resister using Kirchhoff's law.



(Or)

(b) Explain the principle of operation of a DC motor.

18. (a) Define the relationship between line current and phase current in delta connected system.

(Or)

(b) Explain the construction and operation of DOL starter.

19. (a) Explain the construction and working of stepper motor.

(Or)

(b) Explain the causes of accident and their preventive measures.

20. (a) With a neat sketch explain full wave rectifier.

(Or)

(b) Explain LED with suitable sketch.

21. (a) Draw the block diagram of PLC and explain each block.

(Or)

(b) Explain MCCB with neat sketch.
