April 2019

Time - Three hours (Maximum Marks: 75)

- IN.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, j

PART - A

- State Ohm's law.
- 2. What is frequency? What is power?
- Name the starters used in 3\$\phi\$ induction motor.
- 4. What is group drive?
- 5. What is electric shock?
- What is fuse?
- 7. Expand ELCB. On S.COM
- Define SMPS.

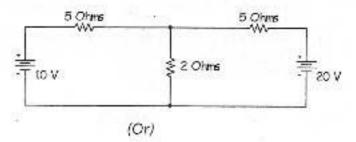
PART - B

- 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.



- (b) Explain the principle of operation of a DC motor.
- (a) Define the relationship between line current and phase current in delta connected system.

(Or)

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

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