# 193

Register No.:	
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## November 2022

<u>Time – Three hours</u> (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.
  - Each question carries 2 marks in PART A, 3 marks in Part B and 10 marks in PART – C. ]

### PART - A

- 1. Name any two methods of measuring earth resistance.
- 2. Who is authorized person?
- 3. Define insulation co-ordination.
- 4. Why automatic voltage regulator is provided in alternator?
- 5. Define instability in alternator.
- 6. Why drying out is necessary in motor?
- 7. What is meant by insulation level?
- 8. Define inrush current.

#### PART - B

- 9. What are the points to be checked in switches and fuses?
- 10. Define ELCB.
- 11. What is the reason for temperature rise in transformers?
- 12. What are the forces generated in transformer during shortcircuit?
- 13. Mention the productive and indication equipment for alternator.
- 14. State any three-attention required for the contact of contactor.
- 15. What are the causes of lowering of illumination level?
- 16. What are the causes for low insulation resistance and rectification?

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### PART - C

17. (a) Explain the measurement of earth resistance using megger earth tester.

(Or)

- (b) Explain procedure for special shutdown in substations and power house.
- 18. (a) Explain the action to be taken while transformer oil, temperature rises unduly in the transformers.

(Or)

- (b) Explain the points to be checked if the oil level tends to fall down.
- 19. (a) Explain the special precaution necessary for parallel operation of alternators.

(Or)

- (b) How to calculate the short circuit level at any point on a distribution system? Explain.
- 20. (a) Explain various enclosures used in electric motors.

(Or)

- (b) Explain in detail the problem occurring in bearings.
- 21. (a) Describe the various steps in designing a lighting installation.

(Or)

(b) Explain the precautions necessary in erecting UG cable.

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