

October 2018

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. What is the purpose of economiser?
2. What is load curve?
3. State any two line supports.
4. What is regulation?
5. State any two types of suspension insulators.
6. State any two faults occurring in the cables.
7. State any two types of oil circuit breakers.
8. State any two types of neutral grounding.

PART – B

9. Explain briefly yawing system.
10. Explain the function of anemometer and wind vane in wind mill.
11. What is the necessity of neutral earthing?
12. Explain briefly the Ferranti effect.
13. What are the properties of good insulators?
14. What are the requirements of cables?
15. Mention the classification of circuit breakers.
16. Explain Kelvin's law.

[Turn over.....

PART – C

17. (a) Draw the schematic diagram of thermal power plant and explain.

(Or)

- (b) Explain the working of a solar energy power plant with a neat sketch.

18. (a) Explain any two conductor materials.

(Or)

- (b) Draw and explain the schematic diagram of HVDC transmission.

19. (a) What are the tests to be conducted on an insulator? Explain each.

(Or)

- (b) Explain with a neat diagram, the construction of any one type of underground cable.

20. (a) Explain with a neat sketch the construction and working of SF₆ circuit breaker.

(Or)

- (b) Explain the construction and working of semi enclosed re-wirable fuse with a neat sketch.

21. (a) Explain with diagram, the construction and working of an induction type non-directional over current relay.

(Or)

- (b) Explain resonant grounding with phasor diagram.
