

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. State the uses of ELCB.
2. Name any two points to be earthed.
3. What is the minimum value of insulation resistance of transformer?
4. What are the causes of instability in alternators?
5. State any two points for causes of overheating of armature and field winding of alternator.
6. What is dynamic balancing?
7. What is glare?
8. What is the maximum variation permitted in the frequency?

PART – B

9. What are the points to be checked in switches and fuses?
10. State any two reasons for temperature rise in transformers.
11. What are the essential conditions for satisfactory parallel operation of transformer?
12. What is the cyclic speed irregularity?
13. What is the effect of ambient temperature?
14. What is the role of single phase preventer?
15. Name any three causes for failure of a UG cable.
16. What is stroboscopic effect?

PART – C

17. (a) Explain any two types of fire extinguishers.
(Or)
(b) Briefly explain the special shutdown precaution in substation and power house.
18. (a) What are attentions required on bushing and insulator?
(Or)
(b) What maintenance work is required for transformers and at what intervals?
19. (a) What is an AVR? State its functions. Why it is provided?
(Or)
(b) Explain the maintenance required for oil circuit breaker.
20. (a) Briefly explain the step to be taken, if a motor is unduly hot.
(Or)
(b) What are the causes of low insulation resistance of electrical equipment and how will you rectify?
21. (a) What are the precautions required for erecting UG cables?
(Or)
(b) What are the causes of failure of UG cable?
