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Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Eighth Semester

Branch: Electrical and Electronics Engineering

SWITCHGEAR AND PROTECTION (E)

(Old Scheme—Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time: Three Hours

Maximum: 100 Marks

LIBRAR

Part A

Answer all questions. Each question carries 4 marks.

- 1. Explain breaking capacity.
- 2. What is current chopping?
- 3. Write a note on classification of relays.
- 4. Explain static differential relay.
- 5. Differentiate internal and external faults.
- 6. Explain the operation of buchholz's relay.
- 7. Write a note on radial feeder protection.
- 8. Explain carrier current protection.
- 9. What are the causes of surge over voltages?
- 10. Explain surge impedance.

 $(10 \times 4 = 40 \text{ marks})$

Part B

Answer all questions.

Each question carries 12 marks.

11. Explain working principle and important features oil cirucuit breakers and vacuum circuit breakers.

Or

- 12. Explain: (i) Are interruption methods.
- (ii) Making capacity.
- 13. Explain the requirements of protective relaying. Explain the principle of directional over current power relays.

Or

14. Explain the block diagram of static over-current and static directional relays.

Turn over

15. Explain the various protections of generators.

- 16. Explain the self balance system of transformer protection.
- 17. Explain protection of parallel feeders and ring mains.

Or

- 18. Explain transmission line protection.
- 19. Explain how to protect from high voltages.

Or

20. Briefly explain wave propagation.

 $(5 \times 12 = 60 \text{ marks})$

