Reg. No.

B.TECH. DEGREE EXAMINATION, MAY 2015

Eighth Semester

Branch: Electrical and Electronics Engineering

EE 010 802—SWITCH GEAR AND PROTECTION (EE)

(New Scheme—2010 Admission onwards)

[Regular/Supplementary]

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

- 1. What are the different types of circuit breaker?
- 2. Explain the method of over current relay.
- 3. What are the different characteristics of relay testing?
- 4. Explain the method of overload protection for generator.
- 5. How will you measure the surge impedance in transmission system?

 $(5 \times 3 = 15 \text{ marks})$

Part B

Answer all questions.

Each question carries 5 marks.

- 6. Explain the basic of isolator and fuses involved in power system.
- 7. Explain the detailed classification of protective relay and its operating principle.
- 8. What are the components involved in static relay system?
- 9. Explain in detail about Translay system.
- 10. How will you protect the system against over voltage?

 $(5 \times 5 = 25 \text{ marks})$

Part C

Answer all questions.
Each question carries 12 marks.

11. Explain in detail about construction and working principle of minimum oil and vacuum circuit breaker.

Or

12. Explain in detail about productive and control gear.

Turn over

13. Give detail about productive and control gear.

Or

- 14. Discuss in detail about the differential relay and its types.
- 15. What is meant by static relay and explain the various components involved in static relay system?

Or

- 16. Explain the construction and working principle of micro process based relay system.
- 17. List out the various conventional protection technique of generators.

Or

- 18. Explain the method of production technique involved in transmission lines.
- 19. Explain the different method of over voltage involved in power system.

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20. Briefly describe about wave propagation in transmission lines and cables.

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

