

EE-1860

B.Tech. (Semester-II) Exam.-2015 Electrical Engineering

Time: Three Hours

Maximum Marks: 100

Note: - Attempt questions from all the sections

SECTION - A

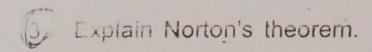
(Short Answer Type Questions)

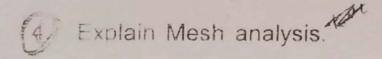
Note: Attempt any ten questions. Each question carry 4 marks 4×10=40

In a circuit with dc source, how does a capacitance behave in steady state.

Explain the meaning and significance of the power factor of a circuit.

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- 5. Explain super position theorem with example.
- Explain the quality factor. How does it affect the circuit Bandwidth?
- A balanced delta connected load of impedance 16+j12 Ω/phase is connected to a three phase 400 V supply. Find the phase current, line current, power factor.
- Fxnlain Hysteresis and Eddy current losses
 - Explain short circuit test in transformer.

State and prove the condition from maximum efficiency of a transformer.

Discuss the method of speed control of a do series motor.

12. Enumerate and classify the losses in a dc shunt motor.

Write the advantages and disadvantages of induction motor.

14 A 3 phase, 4 pole, 60Hz induction motor runs

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15 Ipm at 1500 rpm. Determine its percentage slip.

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