

SECTION-B

- 2) a) A series circuit consists of a 115Ω resistor, a $0.024 \mu\text{F}$ capacitor and coil of inductance L . If the resonant frequency of the circuit is 1000 Hz , determine Inductance and bandwidth.
b) Compare electric and magnetic circuits. Establish the relationship between magnetomotive force, magnetic flux and magnetic reluctance.
- 3) Draw & explain the phasor diagram of RLC series circuits and give the condition for resonance in this circuit.
- 4) Explain the working principle & construction of three phase induction motor.
- 5) Explain the construction & working of induction type energy meter.

SECTION-C

- 6) What is LVDT? Explain its use for the measurement of displacement.
- 7) What is Zener Diode? Explain its use as voltage regulator.
- 8) a) What are the different logic gates? Give their truth tables.
b) Discuss the working of a full wave rectifier.
- 9) Draw the equivalent circuit & truth table of RS Flip-Flop.

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