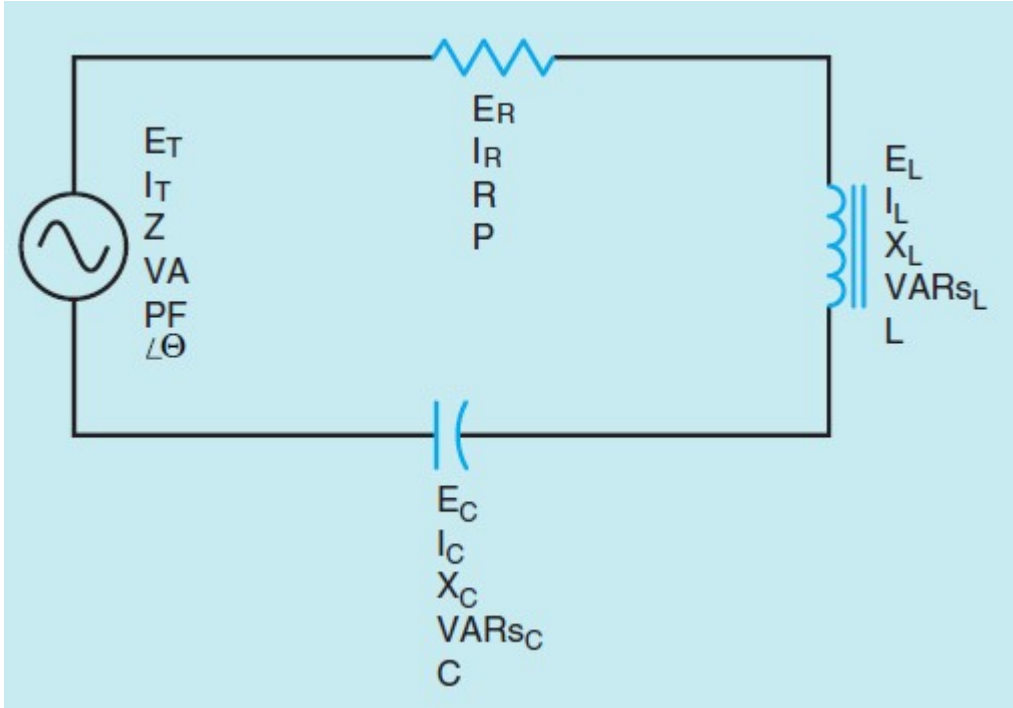


EET1033 H-7 AC RLC series circuits

Multiple Choice

Identify the choice that best completes the statement or answers the question.



1.

$E_T = 120\text{ V}$ $F = 60\text{ Hz}$ $R = 12\text{ Ohms}$ $X_L = 24\text{ Ohms}$ $X_C = 8\text{ Ohms}$

Find: Z impedance in ohms

- a. 30
 - b. 20
 - c. 100
 - d. 50
2. Total current I_T in amps
- a. 20
 - b. 5
 - c. 6
 - d. 7
3. E_R voltage across resistor in volts
- a. 200
 - b. 150
 - c. 80
 - d. 72
4. P_R true power in the resistor in watts
- a. 1500
 - b. 432
 - c. 2000

- d. 1001
- _____ 5. L inductance in henry H
 - a. 1
 - b. 0.8
 - c. 0.0637
 - d. 0.7
- _____ 6. El voltage drop across L in volts
 - a. 144
 - b. 100
 - c. 128
 - d. 240
- _____ 7. Inductance VARSI
 - a. 200
 - b. 300
 - c. 4000
 - d. 864
- _____ 8. Capacitance C in microfarads 10-6
 - a. 100
 - b. 200
 - c. 331.56
 - d. 54
- _____ 9. Ec voltage drop across capacitor in volts
 - a. 50
 - b. 48
 - c. 100
 - d. 25
- _____ 10. VARSc reactive capacitive power in VARs
 - a. 1000
 - b. 288
 - c. 500
 - d. 712
- _____ 11. VA apparent power in VAs
 - a. 1258
 - b. 478
 - c. 600
 - d. 720
- _____ 12. Power Factor PF
 - a. 1
 - b. 0.6
 - c. 2
 - d. 0.5
- _____ 13. angle THETA in degrees
 - a. 45
 - b. 180

- c. 25
- d. 53.13