1. The total resistance of a two similar wire conductors connected in parallel is _____.
   A. resistance of one wire multiplied by 4
   B. same resistance of one wire
   C. one half the resistance of one wire
   D. double the resistance of one wire
   ANSWER: C

2. What is the value of a resistor with colors from left: Orange, Blue, Gold, and Silver?
   A. 34 ohms ± 10%
   B. 3.6 ohms ± 10%
   C. 3.4 ohms ± 10%
   D. 36 ohms ± 10%
   ANSWER: B

3. Determine the value of a resistor with colors from left to right; Brown, Green, Gold, and Silver.
   A. 1.5 ohms ± 10%
   B. 15 ohms ± 10%
   C. 1.5 ohms ± 20%
   D. 15 ohms ± 20%
   ANSWER: A

4. Resistors with high value usually have lower wattage ratings because of _____.
   A. varying current
   B. lower current
   C. bigger size
   D. high current
   ANSWER: B

5. Smaller resistors usually have _____ resistance value.
   A. small
   B. high
   C. low
   D. very small
   ANSWER: B

6. When resistors are connected in series, what happens?
   A. The effective resistance is decreased
   B. Nothing
   C. The tolerance is decreased
   D. The effective resistance is increased
   ANSWER: D

7. A 33 kilo ohms resistor is connected in series with a parallel combination made up of a 56 kilo ohm resistor and a 7.8 kilo ohm resistor. What is the total combined resistance of these three resistors?
   A. 63769 ohms
   B. 49069 ohms
   C. 95800 ohms
   D. 39067 ohms
   ANSWER: D

8. If you need a 1.25 kΩ resistance and you only have resistors of 5 kΩ, how many of these available resistors you should connect in parallel to get a 1.25 kΩ value?
   A. 2
   B. 3
   C. 4
   D. 5
   ANSWER: C

9. Insulating elements or materials has a capability of
   A. allowing electric current to flow
   B. supporting charge flow
   C. preventing short circuit between conducting wires
   D. making electrical circuits to be completed
   ANSWER: C

10. _____ is used to store electrical energy in an electrostatic field?
   A. A transformer
   B. A battery
   C. A capacitor
   D. An inductor
   ANSWER: C

11. What factors determine the capacitance of a capacitor?
   A. Area of the plates, amount of charge on the plates and the dielectric constant of the material between the plates
   B. Area of the plates, voltage on the plates and the distance between the plates
   C. Area of the plates, distance between the plates, and the dielectric constant of the material between the plates
   D. Area of the plates, voltage on the plates and dielectric constant of the material between the plates
   ANSWER: C

12. Factors that determine the capacitance of a capacitor.
   A. area of the plate; directly proportional
   B. distance between plate; inversely proportional
   C. dielectric constant; directly proportional
   D. all of these
   ANSWER: D

13. An electronic/electrical component/device used to store electrical energy.
   A. Capacitor
   B. Inductor
   C. Resistor
   D. lightning arrester
   ANSWER: A

14. Which of the following describes the action of a capacitor?
   A. Converts ac into dc
   B. Stores electrical energy
   C. Opposes change in current flow

D. Creates a dc resistance

ANSWER: B

15. A parallel plate capacitor has the following values: k=81; d=0.025 inches; A=6 square inches. What is the capacitance of the capacitor?
    A. 4.372 picofarad
    B. 43.72 picofarad
    C. 4372 picofarad
    D. 437.2 picofarad

    ANSWER: C

16. Five picofarad is equivalent to _____.
    A. 5 x 10 to the -12^{th}
    B. 50 x 10 to the -12^{th}
    C. 5 x 10 to the -10^{th}
    D. 500 x 10 to the -10^{th}

    ANSWER: A

17. If two micro-farad capacitors are connected in series, what will be the total effective capacitance?
    A. 0.125 microfarad
    B. 0.0624 microfarad
    C. 2.5 microfarad
    D. 0.50 microfarad

    ANSWER: A

18. A 20 μF capacitor is charged by a 12-V battery. What is the stored energy at the capacitor?
    A. 2.88×10^{-3} J
    B. 1.07×10^{-3} J
    C. 1.44×10^{-3} J
    D. 2.88×10^{-2} J

    ANSWER: C

19. Which of the following characterizes inductance?
    A. Tends to oppose dc
    B. Tends to oppose changes in voltage
    C. Tends to oppose changes in current
    D. Opposes all frequencies equally

    ANSWER: C

20. A coil of wire wound, with or without a magnetic core designed to have a higher self-inductance than a straight wire.
    A. Inductor
    B. Solenoid
    C. Toroid
    D. Inductive relay

    ANSWER: A

21. With the same voltage applied, which of the following allows more current?
    A. 25 ohms

B. 250 ohms
C. 0.25 ohms
D. 2.5 ohms

ANSWER: C

22. In electrical circuits, current is known as the flow of charged carriers, such as electrons. When can this happen?
    A. when an electrical force (called emf) is applied
    B. when material used allows electrons to flow
    C. when there is circuit continuity
    D. all of the above

ANSWER: D

23. What utilizes electrical energy in electrical circuits?
    A. supply emf
    B. load
    C. the conducting wires
    D. all of the above

ANSWER: B

24. An electronic device draws 300 watts from its 24-volt power source. Find effective resistance.
    A. 1.92 ohms
    B. 19.20 ohms
    C. 1.25 ohms
    D. 12.50 ohms

ANSWER: A

25. A 50Ω resistor is connected in series with a 150C resistor and to a supply voltage of 20V. What is the current through the 50Ω resistor?
    A. 0.01 A
    B. 0.1 A
    C. 1.0 A
    D. 10 A

ANSWER: B

26. Two resistors, 10Ω and 100Ω are connected in parallel, approximately, aht is the total resistance?
    A. 10Ω
    B. 50Ω
    C. 90Ω
    D. 100Ω

ANSWER: A

27. A shunt resistor is used to limit the load current to 0.5 A, if the load resistance is 100Ω and the original current is 1amp, what should be the value of the shunt resistance?
    A. 25Ω
    B. 50Ω
    C. 75Ω
    D. 100Ω

ANSWER: D

28. How many 1kΩ resistors to be connected in parallel are needed in order to get 100Ω?
    A. 2
    B. 5
    C. 10
    D. 20
    ANSWER: C

29. Two resistors, R_1=100Ω and R_2=200Ω are connected in series, if the voltage across R_2 is 20V, what is the voltage across R_1?
    A. 5 V
    B. 10 V
    C. 15 V
    D. 20 V
    ANSWER: B

30. Two resistors, R_1=100Ω and R_2=200Ω are connected in parallel. If the current through R_1 is 1 A, what would be the current on R_2?
    A. 0.125 A
    B. 0.25 A
    C. 0.35 A
    D. 0.50 A
    ANSWER: D

31. A 6A current source drives a load consisting a parallel combination of R_1 = 50Ω and R_2 = 25Ω. Determine the current I_1 through R_1.
    A. 1 amp
    B. 2 amps
    C. 3 amps
    D. 4 amps
    ANSWER: B

32. A constant voltage source V_s = 60 is delivering a power to a series combination of R_1 = 100Ω, R_2 = 200Ω and R_3 = 300Ω. Calculate the voltage drop across R_2.
    A. 10 V
    B. 20 V
    C. 30 V
    D. 40 V
    ANSWER: B

33. If 12 V are applied to a circuit that consumes 78 W, what is the current flow through the circuit?
    A. 6.5 A
    B. 936 A
    C. 0.15 A
    D. 9.36 A
    ANSWER: A

34. Find the current that flows through the filament of a 400 watts flat iron connected to a 220 Volt power line.
    A. 50 mA

B. 5 A
C. 5 mA
D. 500 mA
ANSWER: D

35. An electrical device has a resistance of 10Ω and is supplied with a 5 ampere constant current source. If the deice is rated 100 V_{dc}, determine its power consumed.
A. 250 W
B. 450 W
C. 750 W
D. 1000 W
ANSWER: A

36. The power dissipated by a 10 Ω load resistor with a current rating of 5 amperes is _____ if supplied with a 20 volt dc potential.
A. 40 W
B. 80 W
C. 160W
D. 250 W
ANSWER: A

37. The power in a circuit consisting of two equal resistors in series is known to be 10 watts. If the two resistors are connected in parallel, what would be the circuit power dissipation?
A. 2.5 watts
B. 5 watts
C. 20 watts
D. 40 watts
ANSWER: D

38. How many nodes are needed to completely analyze a circuit according to kirchhoff's current law?
A. two
B. all nodes in the circuit
C. one less than the total number of nodes in the circuit
D. one
ANSWER: C

39. Loop currents should be assumed to flow in which direction?
A. Straight
B. Either C or D arbitrarily selected
C. Counter-clockwise
D. Clockwise
ANSWER: B

40. What theorem we should use in solving electrical circuits with several voltage sources?
A. superposition
B. Norton
C. Thevenin
D. Kirchhoff
ANSWER: A

41. In a mesh, the algebraic sum of all voltages and voltage drops is equal to zero.
    A. superposition theorem
    B. Norton's law
    C. Kirchhoff's first law
    D. Kirchhoff's second law
    ANSWER: D

42. The sum of all currents entering a junction is equal to the sum of currents leaving away from that junction.
    A. Kirchhoff's first law
    B. Kirchhoff's second law
    C. Norton's theorem
    D. Thevenin's theorem
    ANSWER: A

43. Theorem used to simplify complex circuits wherein, the simplified circuit contains an equivalent open circuit resistance and open circuit voltage.
    A. Norton's
    B. Thevenin's
    C. Maxwell's
    D. Kirchhoff's
    ANSWER: B

44. Considered as the reverse of Thevenin's theorem.
    A. Maxwell
    B. Superposition
    C. Kirchhoff
    D. Norton's
    ANSWER: D

45. A certain Thevenin equivalent circuit has parameters R_{TH} = 10 Ω and V_{TH} = 20 V. If this is converted to Norton's equivalent circuit, R_N and I_N would be
    A. 10Ω and 2A
    B. 10Ω and 4A
    C. 0.10 and 2A
    D. 0.10 and 4A
    ANSWER: A

46. R_N and I_N of a Norton's equivalent circuit are known to be 100Ω and 10A, respectively. If a 400Ω load is connected, it will have a load current of
    A. 1 A
    B. 2 A
    C. 3 A
    D. 4 A
    ANSWER: B

47. A chosen closed path of current flow in a network. In making this current path there should be no node nor elements that are passed more than once.
    A. node
    B. junction

C. mesh
D. loop
ANSWER: C

48. A set of circuit elements that forms a closed path in a network over which signal can circulate.
A. node
B. junction
C. mesh
D. loop
ANSWER: D

49. In a network, what do we call a reference point chosen such that more branches in a circuit met.
A. node
B. junction
C. ground
D. mesh
ANSWER: A

50. A common connection between circuit elements or conductors from different branches.
A. node
B. junction
C. ground
D. mesh
ANSWER: B

51. The return point in a circuit, where all voltage measurements are referred.
A. node
B. junction
C. ground
D. loop
ANSWER: C

52. Mesh analysis is best used together with what circuit law?
A. KVL
B. KCL
C. VDT
D. CDT
ANSWER: A

53. Nodal analysis is best used together with
A. KVL
B. KCL
C. VDT
D. CDT
ANSWER: B

54. Three 100Ω resistors are connected in a tee-form (T) network and is set up between a 100 V supply and a load resistor R_L. If maximum power transfer is desired, what should be the resistance of the load resistor R_L?

A. 50 Ω
B. 75 Ω
C. 125 Ω
D. 150 Ω

ANSWER: D

55. Theorem used in simplifying circuit analysis by considering the effect of supply voltages one at a time.
A. Thevenin's theorem
B. Norton's theorem
C. Superposition
D. KVL

ANSWER: C

56. Three resistors, R_1 = 60 Ω, R_2 = 80 Ω and R_3 = 100 are connected in delta. If the network is to be transformed into star, what would be the value of the resistor opposite of R_2?
A. 25.0 Ω
B. 33.3 Ω
C. 45.0 Ω
D. 56.7 Ω

ANSWER: A

57. The description of two sine waves that are in step with each other going through their maximum and minimum points at the same time and in the same direction
A. phased sine wave
B. sine waves in phase
C. sine wave in coordination
D. stepped sine waves

ANSWER: B

58. Most ac-supplies are in the form of
A. sine-wave
B. square-wave
C. triangular-wave
D. rectangular-wave

ANSWER: A

59. Advantage(s) of ac over dc
A. economically produced
B. transmission of ac is more efficient
C. ac voltages can be easily changed
D. all of the above

ANSWER: D

60. An ac-voltage has an equation $v = 240 \sin 120\pi t$, its frequency is
A. 60 Hz
B. 90 Hz
C. 120 Hz
D. 240 Hz

ANSWER: A

61. When can an ac-voltage, v = 120sin120πt reach its first peak?
    A. 4.167 μs
    B. 8.334 μs
    C. 4.167 ms
    D. 8.334 ms
    ANSWER: C

62. Calculate the period of an alternating current having an equation of $I = 20\sin 120\pi t$.
    A. 4.167 ms
    B. 8.33 ms
    C. 16.67 ms
    D. 33.33 ms
    ANSWER: C

63. The time taken by an alternating voltage, v = 100sin240πt to reach 50V for the first time
    A. 358 μs
    B. 695 μs
    C. 358 ms
    D. 695 ms
    ANSWER: D

64. An alternating voltage of sine-wave form has a maximum voltage of 311V. What is its value at 225°?
    A. 110 V
    B. 220 V
    C. -220 V
    D. -110 V
    ANSWER: C

65. If an alternating voltage has a magnitude of 10 V at 30°, what is its maximum voltage?
    A. 20 V
    B. 30 V
    C. 40 V
    D. 50 V
    ANSWER: A

66. What is the frequency of an alternating current, if it reaches 90° within 4.167 ms?
    A. 20 Hz
    B. 30 Hz
    C. 50 HZ
    D. 60 Hz
    ANSWER: D

67. At what angle does an alternating voltage of cosine-waveform reaches its negative peak?
    A. 45°
    B. 90°
    C. 135°
    D. 180°
    ANSWER: D

68. When comparing rms voltages and average voltages, which of the following statement is true, assuming sine waves?
    A. Either the rms voltage or the average voltage might be larger
    B. The rms voltage is always greater than the average voltage
    C. There will always be a very large difference between the rms voltage and the average voltage
    D. The average voltage is always greater than the rms voltage

    ANSWER: B

69. What is the average voltage of an alternating voltage, $v = 100\sin 120\pi t$?
    A. 31.8 V
    B. 63.6 V
    C. 70.71 V
    D. 0 (zero) V

    ANSWER: D

70. Determine the effective voltage of $v = 100\sin 120\pi t$.
    A. 31.80 V
    B. 35.35 V
    C. 70.71 V
    D. 90.00 V

    ANSWER: D

71. What do you mean by root-mean-squared (rms) value?
    A. it is the average value
    B. it is the effective value
    C. it is the value that causes the same heating effect as a dc-voltage
    D. B or C

    ANSWER: D

72. The power dissipated across the resistance in an AC circuit
    A. real power
    B. reactive power
    C. apparent power
    D. true power

    ANSWER: D

73. In AC circuit, resistors will dissipate what power?
    A. reactive
    B. passive
    C. inductive
    D. true

    ANSWER: D

74. In an ac-circuit, if the voltage and current are in phase, the circuit is
    A. resistive
    B. reactive
    C. capacitive
    D. inductive

    ANSWER: A

75. If the current in an ac-circuit leads the voltage by 90°, the circuit is
    A. resistive
    B. capacitive
    C. inductive
    D. purely inductive
    ANSWER: B

76. In a purely inductive circuit the current
    A. leads the voltage by 45°
    B. leads the voltage by 90°
    C. lags the voltage by 90°
    D. lags the voltage by 45°
    ANSWER: C

77. If the current and voltage in an ac-circuit has a phase difference, it would mean the load is
    A. resistive
    B. capacitive
    C. inductive
    D. reactive
    ANSWER: D

78. A resistive and a capacitive load of equal magnitude is connected in series, determine the phase difference between the voltage and the current.
    A. current leads the voltage by 45°
    B. current lags the voltage by 45°
    C. current leads the voltage by 90°
    D. current lags the voltage by 90°
    ANSWER: A

79. The reactance of a 25 mH coil at 500 Hz is which of the following?
    A. 785 ohms
    B. 785,000 ohms
    C. 13 ohms
    D. 0.0013 ohms
    ANSWER: A

80. The impedance in the study of electronics is represented by resistance and _____.
    A. inductance and capacitance
    B. inductance
    C. reactance
    D. capacitance
    ANSWER: C

81. A series circuit consists of an 80 mH inductor and a 150μF capacitor. Calculate the total reactance if it is connected to a 220-volt 60-cycle source.
    A. 12.5 Ω inductive
    B. 12.5 Ω capacitive
    C. 47.8 Ω inductive
    D. 47.8 Ω capacitive

ANSWER: A

82. Ignoring any inductive effects, what is the impedance of RC series capacitor made up of a 56 kilo ohms resistor and a 0.33 μF capacitor at a signal frequency of 450 Hz?
    A. 66,730 ohms
    B. 57,019 ohms
    C. 45,270 ohms
    D. 10,730 ohms
ANSWER: B

83. A 220-volt, 60-Hz source is driving a series RL circuit. Determine the current in the circuit if R = 100 Ω and X_L = 100 Ω.
    A. 1.10 A (lagging)
    B. 1.55 A (lagging)
    C. 2.20 A (lagging)
    D. 4.40 A (lagging)
ANSWER: B

84. How many electrical degrees a current will lead the voltage in a series RC load with R = 100 Ω and X_C = 50 Ω?
    A. 13.28°
    B. 26.56°
    C. 31.72°
    D. 63.44°
ANSWER: B

85. What will be the current equation in a series RC network if supplied with $v = V_m \sin 120\pi t$ source. The circuit has a power factor pf = 0.5?
    A. $i = I_{max} \sin(120\pi t + 60)$
    B. $i = I_{max} \sin(120\pi t - 60)$
    C. $i = I_{max} \sin(120\pi t + 30)$
    D. $i = I_{max} \sin(120\pi t - 30)$
ANSWER: A

86. The power factor (pf) of a series LC circuit is
    A. 0
    B. 0.5
    C. 0.75
    D. 1.0
ANSWER: A

87. What is the power factor (pf) of a series RL circuit having R = 50Ω and X_L = 20Ω?
    A. 0.63
    B. 0.71
    C. 0.81
    D. 0.93
ANSWER: D

88. A 200Ω resistor if connected in series with a capacitive reactance of 100 will give a total circuit impedance of
    A. 173.2 Ω

B. 223.6 Ω
C. 250.6 Ω
D. 300.0 Ω
ANSWER: B

89. What will happen when the power factor of a circuit is increased?
A. reactive power increases
B. active power increases
C. both active and reactive powers increases
D. both active and reactive powers decreases
ANSWER: B

90. A series RL network is supplied with a 200-volt, 60-cycle source. If the voltage across the resistor R is 100 V, what is the voltage across the inductor L?
A. 0 V
B. 100 V
C. 173.2 V
D. 200 V
ANSWER: C

91. A 6-Ω resistor is connected in series with a capacitive reactance of 8 Ω. If the supply voltage is 200 V, what is the power consumed by the circuit?
A. 2400 W
B. 4000 W
C. 5000 W
D. 6666.67 W
ANSWER: A

92. A 6-Ω resistor is connected in series with a capacitive reactance of 8 Ω. If the supply voltage is 200 V, what is the circuit current magnitude?
A. 14.28 A
B. 20 A
C. 25 A
D. 33.33 A
ANSWER: B

93. A 6-Ω resistor is connected in series with a capacitive reactance of 8 Ω. If the supply voltage is 200 V, what is the apparent power of the circuit?
A. 1200 W
B. 2400 W
C. 3200 W
D. 4000 W
ANSWER: D

94. The apparent power of a series RC network is given to be 4000 W. If R = 6 Ω, and X_C = 8 Ω, calculate the true power of the network.
A. 1200 W
B. 2400 W
C. 3200 W
D. 4000 W
ANSWER: B

95. A series RC circuit has an apparent power of 4000 W. If R = 6Ω, and X_C = 8Ω, determine the reactive power.
    A. 1200 W
    B. 2400 W
    C. 3200 W
    D. 4000 W
    ANSWER: C

96. A network has a true power and a reactive power of 2400 W and 3200 W respectively. What is its apparent power?
    A. 800 W
    B. 1600 W
    C. 4000 W
    D. 5600 W
    ANSWER: C

97. What is the total impedance of a series circuit consisting of R = 6Ω, X_C = 8Ω, and X_L = 16Ω?
    A. 10 Ω
    B. 14 Ω
    C. 24.73 Ω
    D. 30 Ω
    ANSWER: A

98. What is the significance of connecting loads in parallel?
    A. it makes power consumption less
    B. it provides greater efficiency
    C. it increases the safety factor
    D. it allows independent operations of loads
    ANSWER: D

99. A parallel RL circuit with R = 60Ω, and X_L = 40Ω has a total impedance of
    A. 24.3 Ω
    B. 28.3 Ω
    C. 33.3 Ω
    D. 38.3 Ω
    ANSWER: C

100. Calculate the total impedance of a parallel RC circuit if R = X_C = 50Ω.
    A. 25 @ 45° Ω
    B. 25 @ -45° Ω
    C. 35.35 @ 45° Ω
    D. 35.35 @ -45° Ω
    ANSWER: D

101. A 100-volt source is supplying a parallel RC circuit having a total impedance of 35.35Ω. Calculate the total line current.
    A. 2.83 ∠ 45°
    B. 2.83 ∠ -45°
    C. 4.00 ∠ 45°

D. $4.00 \angle -45°$

ANSWER: A

102. What is the power factor of a circuit if the inductive susceptance and conductance have the same value?
   A. 0.325
   B. 0.525
   C. 0.673
   D. 0.707

ANSWER: D

103. If a circuit has an admittance of Y = 0.2 + j0.6, the circuit is
   A. purely inductive
   B. inductive
   C. capacitive
   D. reactive

ANSWER: C

104. The circuit admittance Y = 0.2 - j0.6, the circuit is
   A. resistive
   B. inductive
   C. capacitive
   D. reactive

ANSWER: B

105. What is the resonant frequency of a circuit when L is 50 microhenrys and C is 40 picofarads are in parallel?
   A. 7.96 MHz
   B. 79.6 MHz
   C. 3.56 MHz
   D. 1.78 MHz

ANSWER: C

106. If you need an LC circuit to be resonant at 2500 Hz and use a 150 mH coil, what should the capacitance value be?
   A. 0.027 µF
   B. 0.015 µF
   C. 0.15 µF
   D. 27 µF

ANSWER: A

107. What is the resonant frequency of a circuit when L of 3 microhenry and C of 40 picofarad are in series?
   A. 1.33 MHz
   B. 14.5 MHz
   C. 14.5 kHz
   D. 1.33 kHz

ANSWER: B

108. What is the resonant frequency of a circuit when L of 25 microhenry and C of 10 picofarad are in parallel?

A. 63.7 MHz
B. 10.1 MHz
C. 63.7 kHz
D. 10.1 kHz
ANSWER: B

109. A series circuit at resonance would mean, the circuit is
A. resistive
B. inductive
C. capacitive
D. reactive
ANSWER: A

110. Characteristics of the current in a series R-L-C circuit at resonance.
A. It is dc
B. It is a minimum
C. It is zero
D. It is at maximum
ANSWER: D

111. What is the cause of a minimum Q on a single-tuned LC circuit?
A. decreased series resistor
B. decreased shunt resistor
C. increased shunt resistor
D. decreased capacitance
ANSWER: C

112. Find the half-power bandwidth of a parallel resonant circuit, which has a resonant frequency of 3.6 MHz and a Q of 218.
A. 606 kHz
B. 58.7 kHz
C. 16.5 kHz
D. 47.3 kHz
ANSWER: C

113. A parallel circuit at resonance would mean, the circuit is
A. resistive
B. inductive
C. reactive
D. capacitive
ANSWER: A

114. What will happen to a parallel ac-circuit if its line frequency is more than the resonant frequency?
A. becomes purely resistive
B. becomes purely capacitive
C. becomes inductive
D. becomes capacitive
ANSWER: D

115. In a series ac-circuit, if the line frequency is more than the resonant frequency, the circuit behaves as
    A. resistive
    B. inductive
    C. reactive
    D. capacitive

ANSWER: B

116. If the line frequency of a parallel ac-circuit is less than the resonant frequency, the circuit behaves as
    A. resistive
    B. reactive
    C. capacitive
    D. purely inductive

ANSWER: B

117. If an ac-series circuit is supplied with a source whose frequency is less than that of f_r, the circuit becomes
    A. resistive
    B. reactive
    C. inductive
    D. capacitive

ANSWER: D

118. _____ is a parallel LC circuit.
    A. Parallel resisting circuit
    B. Static circuit
    C. Tank circuit
    D. Hartley circuit

ANSWER: C

119. A parallel LC network with L = 100 mH and C = 25μF will resonate at what frequency?
    A. 25 Hz
    B. 45.5 Hz
    C. 75.6 Hz
    D. 100 Hz

ANSWER: D

120. Absolutely, when can we say that the circuit is at resonance?
    A. when $X_L = X_C$
    B. when the current is minimum
    C. when the voltage and current are in-phase
    D. all of the above

ANSWER: C