Q. 1. Capacitive reactance is measured in: - (AMTH-P10-56)

(1) Ohms. **(2)** Farads **(3)** Micro farads **(4)** Ohm Meter

Q. 2. Capacitive Reactance is dependent upon: - (AMTH-P10-56)

(1) Frequency. **(2)** Capacitance **(3)** Both 1 & 2 **(4)** Length, Area, Material & No of turns

Q. 3. In a Inductor Amount of Induced EMF is directly proportional to: - (AMTH-P10-57)

(1) Rate of change of Flux in a inductor. **(2)** Frequency **(3)** Voltage **(4)** Reactance

Q. 4. Inductance is the: - (AMTH-P10-58)

(1) Property to oppose any change in current thru it **(2)** Property to oppose any change in voltage thru it **(3)** Both 1 & 2 **(4)** Resistance

Q. 5. Tick the factors affecting Inductance: - (AMTH-P10-58)

(1) No of Turns & Type of Core material **(2)** Both Area & Length of coil **(3)** Type of Core material **(4)** As in 1, 2 & 3

Q. 6. The EMF induced in a circuit always act in such a direction that opposes the change in current: - (Eismin-P86)

(1) Bio savart Law **(2)** Coulomb Law **(3)** Lenz,s Law **(4)** Faraday,s Law

Q. 7. Time constant (T tau) in a Inductive circuit is: - (AMTH-P10-58) & (Eismin-P107)

(1) T=L/R. **(2)** T=L/RC **(3)** T=LxR **(4)** T=R/L

Q. 8. Which produces more Induced emf in a conductor when: - (Grobs-10thEd-P579)

(1) AC flows **(2)** Steady DC passes **(3)** Both 1 & 2 **(4)** Same Value of Induced EMF for AC & DC

Q. 9. When Low Inductance is desired the Coil will have: - (Grobs-10thEd-P579) & (Eismin-P107)

(1) No core at all **(2)** Soft iron core **(3)** Hard steel core **(4)** None of All

Q. 10. Steady DC current: - (Grobs-10thEd-P579)

(1) Is not affected by the inductance **(2)** affected by inductance like AC **(3)** Both 1 & 2 **(4)** AOA

Q. 11. Air core in inductors has: - (AMTH-P10-59)

(1) Low inductance with low eddy current & hysteresis losses **(2)** Low inductance with High eddy current & hysteresis losses **(3)** High inductance with Low eddy current & hysteresis losses **(4)** Same value for any type of core

Q. 12. Inductance and Inductive reactance is represented by & symbolizes with letter respectively: - (AMTH-P10-59)

(1) L & H **(2)** mH & L **(3)** L & XL **(4)** XL & XC

Q. 13. When two inductors are in series the total inductance will be: - (AMTH-P10-59)

(1) L1 + L2 **(2)** 1/L1 +L2 **(3)** L1xL2/L1 +L2 **(1)** **(4)** both 2 & 3

Q. 14. Inductive reactance is equal to: - (AMTH-P10-60)

(1) 6.28xLxF **(2)** 1.73xLxF **(3)** 6.28xLxN **(4)** 3.14xLxF

Q. 15. An Inductive reactance is in Ohms then: -

(1) Frequency is in KHz & Inductance in mili Henry **(2)** Frequency is in Hz & Inductance in Henry **(3)** Frequency is in Hz & Inductance in Henry **(4)** Frequency is in Hz & Inductance in micro Henry

Q. 16. In a series resonant circuit, increasing Inductance to twice its value and reducing capacitance to its half value will: -

(1) Change the resonant frequency (2) Change impedance of the circuit at resonant frequency 3) Change maximum value of current at resonance (4) Increase the selectivity of the circuit

Q. 17. Inductance affects the DC flow:-

(1) At the time of turning ON only (2) At the time of turning ON and turning OFF 3) At the time of turning OFF only (4) At all time of operation

Q. 18. The time required for establishing a steady state current in a circuit consisting of resistance connected in series with a suitable reactor Inductor:-

(1) Depends on the ratio of Inductance to resistance (2) At the time required to saturate the inductor coil & core 3) 63% Time to charge the capacitor (4) AOA

Q. 19. Dynamically induced EMF is equal to (B-Flux density) (L-Length of conductor) (A-Area of Conductor) (V-velocity of movement):-

(1) BxLxV (2) BxLxAxV (3) BxAx/L (4) AxLxV/B

Q. 20. What Energy stored in a in coil (Inductor):-

(1) Half the inductance (L) & Voltage (2) Half the inductance (L) & Square of current (3) Inductance x Induced emf (4) Flux x Velocity

Q. 21. Find Inductive Reactance XL of coil having 6 mH inductance at 41.67 KHz:-

(1) 1570 ohms (2) 570 ohms (3) 157 ohms (4) 1570 K-ohms

Q. 22. What is the value of Inductance in Henry, for coil having Inductive reactance 6280 Ohms & frequency of 1Kz:-

(1) 0.1 (2) 10 (3) 0.01 (4) 1

Q. 23. What is the value of Frequency in Hz, when 2.2 microfarad capacitor is & Capacitive reactance is 200 Ohms:-

(1) 361.7 (2) 3617 (3) 36.17 (4) 3.617

Q. 24. Find frequency in Hz while 10 microfarad capacitor having reactance of 100 ohms:-

(1) 159 (2) 1590 (3) 15.9 (4) 1.59

Q. 25. Synthetic material having property of ferromagnetic substance are called: -

(1) Ferrite (2) Soft iron (3) Iron Cobalt aluminum alloy (4) Iron

Q. 26. Dielectric constant of a capacitor is: -

(1). max V that can be applied to a capacitor. (2). electrostatic storing capability of the dielectric. (3). max I stored in the capacitor.

Q. 27. In a capacitor, the dielectric strength is measured in: -

(1). Farads per meter. (2). Volts per meters. (3). Coulombs per m2.

Q. 28. Glass is an example of a: -

(1). coercive material. (2). paramagnetic material. (3). diamagnetic material.

Q. 29. A solenoid of 10 turns per meter carries a current of 5A. If the current is reduced to 2.5A, how many turns would be required to maintain the same magnetic field?

(1). 20. (2). 50. (3). 5. Correct Answer is. 20. Explanation. Flux = N*I, so halve the current you must double the windings.

Q. 30. What is the formula for working out the capacitance of a capacitor if K = dielectric constant, A = area of the plates, d = distance plates apart?

(1). c = K*A/d. (2). c = d/K*A. (3). c = K*d/A.

Q. 31. The time constant of a capacitor is the time: -

(1). the current to reach 63.2% of maximum. (2). for the emf to reach 63.2% of maximum. (3). to reach maximum current.

Q. 32. The charge on a capacitor is expressed as: -

(1). the ratio Q/V. (2). the product Q * V. (3). the product C * V.

Q. 33. When would you use an electrolytic capacitor?

(1). On a balanced circuit. (2). Low output compared to size required. (3). Large output compared to size required.

Q. 34. A capacitor has Brown, Black and Orange bands. Its value is: -

(1). 10 picofarads. (2). 10 nanofarads. (3). 100 picofarads.

Q. 35. When checking a capacitor with an ohmmeter, if the reading shows charging but the final reading is less than normal then the possible fault is a: -

(1). leaking dielectric capacitor. (2). short circuit dielectric. (3). open circuit dielectric.

Q. 36. A capacitor is fully charged after 25 seconds to a battery voltage of 20 Volts. The battery is replaced with a short circuit. What will be the voltage across the capacitor after one time constant?

(1). 0 volts. (2). 7.36 volts. (3). 12.64 volts.

Q. 37. The voltage rating of a capacitor is: -

(1). the max voltage that can be constantly applied. (2). the min voltage required to charge. (3). the normal operating voltage.

Q. 38. A capacitor with double the area and double the dielectric thickness will have: -

(1). double the capacitance. (2). the same capacitance. (3). half the capacitance.

Q. 39. An electrolytic capacitor is used where: -

(1). minimum losses are essential. (2). there is a polarized input. (3). high frequency AC is used.

Q. 40. What must you do to make a 3 F capacitor circuit into a 2 F circuit?

(1). Put a 2 F capacitor in parallel. (2). Put a 6 F capacitor in series. (3). Put a 1 F capacitor in series.

Q. 41. Three 12 µ(micro)F capacitors are in series. The total capacitance is: -

(1). 12 µ(micro)F. (1). 4 µ(micro)F. (3). 36 µ(micro)F.

Q. 42. When different rated capacitors are connected in parallel in a circuit, the total capacitance is.: -

(1). less than the capacitance of the lowest rated capacitor. (2). equal to the capacitance of the highest rated capacitor. (3). equal to the sum of all the capacitances

Q. 43. The switch on a DC circuit containing a fully charged capacitor is opened. The voltage across the capacitor: -

(1). drops immediately to zero. (2). starts to fall exponentially to zero (3). remains equal to the original charging voltage supply..

Q. 44. The current in a DC circuit containing a fully charged capacitor is: -

(1). zero. (2). is dependent upon the size of the capacitance of the capacitor. (3). maximum.

Q. 45. When two capacitors are connected in series: -

(1). the charge stored on each is inversely proportional to the voltage across it. (2). the charge stored on each is the same. (3). the charge stored on each is directly proportional to its capacitance.

Q. 46. The charge on a capacitor is expressed as; -

(1). the ratio Q/V. (2). the product Q * V. (3). the product C * V.

Q. 47. When handling a high voltage capacitor in an electrical circuit, be sure it: -

(1). has a full charge before removing it from the circuit. (2). is fully discharged before removing it from the circuit. (3). has at least a residual charge before removing it from the circuit.

Q. 48. The dielectric constant of a capacitor is a measurement of: -

(1). the electrical resistance of the capacitor dielectric. (2). the electrostatic energy storing capacity of the capacitor dielectric. (3). the electrical repulsion of electrons within the dielectric material.

Q. 49. When a capacitor is charged from a DC supply, the voltage/time curve is: -

(1). logarithmic. (2). linear. (3). exponential.

Q. 50. An electrolytic capacitor would be used in circuits supplying: -

(1). heavy loads. (2). light loads. (3). heavy / light loads

Q. 51. What is the value of a monolithic capacitor with 103 on it?

(1). 1000pf. (2). 10,000pf. (3). 100,000pf.

Q. 52. The induced EMF in a closed loop of wire is proportional to the ---------- of magnetic flux thru the wire: - (Module-3 P 11.7)

(1) Rate of change. (2) Inductive reactance. (3) Permeability. (4) Current.

Q. 53. The negative power in an inductive circuit is: - (Module-3 P 11.)

(1) The inductor is releasing power back to circuit. (2) Inductor is absorbing power from the circuit. (3) No power. (4) NOA.

Q. 55. The inductor: - (Module-3 P 11.)

(1) Releasing as much power back to the circuit. (2) Inductor is absorbing as much power from the circuit. (3) No power. (4) Both 1 & 2.

Q. 56. The net energy dissipated by a pure inductive circuit is: - (Module-3 P 11.)

(1) Zero. (2) Dependent upon time. (3) Maximum power consumed. (4) NOA.

Q. 57. Which of the following gives materials in order of increasing values of permeability?

(A) Water, Iron. Copper, Silver (B) Water, Air, Pure iron. Permalloy (C) Cobalt, Aluminium, Copper, Silver (D) Silicon iron. Palladium, Lead, Silver.

Q. 58. By adding silicon to ferromagnetic, materials

(A) electrical resistivity increases and also magnetic permeability increases (B) electrical resistivity decreases and also magnetic permeability increases

(C) electrical resistivity decreases and magnetic permeability increases

Q. 59. Día-magnetic: Paramagnetic:

(A) Water: Air (B) Iron: Steel (C) Perm alloy: Super-alloy (D) Nickel: Cobalt.

Q. 60. Which of the following material has the highest permeability ?

(A) Nickel (B) Cobalt (C) Pure iron (D) Permalloy.

Q. 61. Which variety of copper is used for overhead conductors ?

(A) Hard drawn copper (B) Native copper (C) Annealed copper (D) Purest form of copper.

Q. 62. Which is non-magnetic material

(A) Nickel (B) Cobalt (C) Aluminium (D) Gadolinium.

Q.63. Which of the following is the least desired property in magnetic materials for electrical engineering applications?

(A) High magnetic permeability (B) High electrical resistivity (C) Large hysteresis loop (D) All of the above.

Q. 64. The relative permittivity of a capacitor is: -

(1). the permittivity of the dielectric. (2). the relative permittivity of the dielectric in relation to a vacuum.
(3). the permittivity of dielectric in relation to dry air.

Q. 65. Inductance is the property of a circuit to oppose any change in ----------: - (Module-3 P 11.5)

(1) Current. (2) EMF. (3) Flux. (4) AOA.

Q. 66. Inductive reactance is directly proportional to the: - (Module-3 P 11.6)

(1) Inductance. (2) Option 1 & Frequency. (3) Flux. (4) Option 3 & material of core.

Q. 67. The opposition offered to the flow of alternating current is called: - (Module-3 P 11.7)

(1) Inductance. (2) Inductive reactance. (3) Reluctance. (4) Impedance.

Q. 68. The value of Xc in a circuit will determine ------ :- (Grobs-Ch10-P530)

(1) How much current Capacitor will allow for given value of applied voltage. (2) Capacity of Capacitor to store charge (3) How much voltage can be applied for given value of current (4) NOA

Q. 69. The capacitive reactance in series will be :- (Grobs-Ch10-P530)

(1) Calculated as resistances in series. (2) Both 1 & 3 (3) Calculated as resistances in parallel (4) Calculated as Capacitances in series

Q. 70. The Inductive reactance in parallel will be :- (Grobs-Ch10-P530)

(1) Calculated as resistances in series (2) Both 1 & 3 (3) Calculated as resistances in parallel. (4) Calculated as Capacitances in parallel

Q. 71. The main purpose of Capacitive reactance is to: - (Grobs-Ch10-P535)

(1) Block DC and provide low reactance for AC. (2) Both 1 & 3 (3) Block DC and provide High reactance for AC (4) Block AC and provide low reactance for DC

Q. 72. In the series CR circuit the Capacitive Current is :- (Grobs-Ch10-P550)

(1) more in resistance and less in capacitor (2) Less in resistance and more in capacitor (3) Same in resistance and capacitor as well. (4) Either 1 or 2

Q. 73. In the series CR circuit the frequency of wave is :- (Grobs-Ch10-P551)

(1) Different for voltage and current in capacitor (2) different in resistance and capacitor (3) Same for voltage and current in capacitor. (4) either 1 or 2

Q. 74. When the values of alternating currents are out of phase :- (Grobs-Ch10-P553)

(1) They are added by algebraically (2) added by Pythagorean theorem. (3) Subtracted arithmetically (4) either 2 or 3

Q. 76. When the capacitors are connected in series they serve as: - (Grobs-Ch10-P552)

(1) Voltage divider. (2) Current divider (3) Power divider (4) both 1 or 2

Q. 77. The resultant of the phaser addition of Vc and Vr in a RC series circuit is achieved by :- (Grobs-Ch10-P553)

(1) Current triangle (2) Pythagorean theorem (3) Right angle triangle (4) Both 2 and 3.

Q. 78. MTCS, the Vc and Vr of a RC series circuit are :- (Grobs-Ch10-P553)

(1) In-phase (2) Out of phase by 90 degree. (3) Out of phase by 180 degree (4) In phase by 90 degree

Q. 79. MTCS, while calculating the applied voltage in RMS Value, the Vc and Vr of a RC series circuit, should also be :- (Grobs-Ch10-P553)

(1) Instantaneous value only (2) Peak value only (3) RMS value only. (4) either 1 or 2

Q. 80. The resultant of the phaser addition of Xc and R in a series RC circuit is their opposition in--------- called---------- respectively: - (Grobs-Ch10-P554)

(1) Ampere, Total current (2) Ohms, Impedance. (3) Resistance, Net Voltage drop (4) NOA

Q. 81. In a series RC circuit, more capacitive is the circuit: - (Grobs-Ch10-P555)

(1) More power loss across C and less voltage drop across C (2) More current across Resistance (3) More voltage drop across Capacitor. (4) Both1 & 2

Q. 82. MTCS, the Series LCR circuits has: - (Grobs-Ch10-P557)

(1) Common current and different voltage drop. (2) Common voltage and different current (3) Different voltage and different branch current (4) Both 3 & 2

Q. 83. MTCS, the Parallael LCR circuits has: - (Grobs-Ch10-P557)

(1) Common current and different voltage drop (2) Common voltage and different branch current. (3) Different voltage and different branch current (4) Both 1 & 2

Q. 84. MTCS, in the parallel LCR circuits, the applied voltage is: - (Grobs-Ch10-P557)

(1) In phase with branch voltage. (2) 90 degree out of phase with branch voltage (3) Both 2 & 4 (4) 180 degree out of phase with branch voltage

Q. 85. MTCS,in the parallel LCR circuits ,if the branch currents are out of phase they have to be added : - (Grobs-Ch10-P558)

(1) with phase angle in account (2) algebraically with phaser voltage triangle (3) 1 and by phaser current triangle Pythagorean. (4) Both 1 & 2

Q. 86. MTCS, the parallel CR circuits the total current can be calculated : - (Grobs-Ch10-P559)

(1) by taking the square root of the sum of square of currents. (2) By taking the square root of the sum of current (3) by taking the algebric difference of square of currents (4) by taking the square root of the product of square of currents

Q. 87. MTCS ,in the parallel CR ,LR or LC circuit if the phase angle "theta" is 45 degree (Tan theta) then : - (Grobs-Ch10-P559)

(1) Capacitive current is equal to resistive current (2) Inductive current is equal to resistive current (3) capacitive current is equal to Inductive current (4) All condition are correct.

Q. 88. MTCS, in the parallel CR circuit if Xc is very small then: - (Grobs-Ch10-P560)

(1) it provides more leading capacitive current in the main line. (2) it provides less lagging capacitive current in the main line (3) it provides more lagging capacitive current (4) AOA

Q. 89. MTCS, in non-sinusoidal waveform: - (Grobs-Ch10-P560)

(1) Concept of reactance has to be used (2) Concept of reactance cannot be used. (3) Concept of resistance is used (4) NOA

Q. 90. While measuring voltage across capacitors use: - (Grobs-Ch10-P560)

(1) Digital Multi meter (DMM) with high internal R. (2) Analogue DC Volt meter (3) both 2 & 4 (4) Digital Multi meter (DMM) with Low internal R

Q. 91. Series connected capacitors serve as : - (Grobs-Ch10-P562)

(1) current divider (2) DC Voltage divider (3) both 2 & 4. (4) AC Voltage divider

Q. 92. Sine wave of voltage variation of capacitor voltage produces -------- wave of capacitor current: - (Grobs-Ch10-P562)

(1) Pulsating Sine wave (2) Cosine wave. (3) Square wave (4) Saw tooth wave

Q. 93. In a capacitive circuit Reactance Xc applies to : - (Grobs-Ed10-P564)

(1) Sine waveform only. (2) Asymmetrical waveform (3) Non sinusoidal waveform (4) AOA

Q. 94. In a pure series inductive circuit, inductive Reactance Xl equal to : - (Grobs-Ed10-P630)

(1) Sum of individual reactance. (2) half the sum of two reactance (3) one third of total resistance (4) NOA

Q. 95. The general use of inductor is to provide ----------reactance for---------- frequencies respectively: - (Grobs-Ch10-P630)

(1) Low, High (2) High, Low (3) Low, Low. (4) Minimum, Maximum

Q. 96. During high input frequencies the inductor will ----------the current in the circuit: - (Grobs-Ed10-P631)

(1) Vary (2) Increase (3) Reduce. (4) Short circuit

Q. 97. In the Inductor the sine wave input of current produces: - (Grobs-Ed10-P633)

(1) Cosine wave of voltage. (2) Cosine wave of current (3) Sine wave of voltage (4) NOA

Q. 98. When the elements Inductor and resistance are in series the current is: - (Grobs-Ed10-P633)

(1) Different in each element (2) Same in each element. (3) More in Inductor and less in resistance (4) NOA

Q. 99. When the elements Inductor and resistance are in series the Inductive voltage drop (Vl) and Resistive voltage drop (IR) are : - (Grobs-Ed10-P649)

(1) In phase (2) Out of phase by 90 degree (3) two phaser have to be added by using Pythagorean theorem (4) Both 2 & 3.

Q. 100. When the elements Inductor and resistance are in series the current (I) thru the R and Resistive voltage drop (IR) are : - (Grobs-Ed10-P648)

(1) In phase (2) Out of phase by 90 degree (3) I and IR have phase angle of 0 degree (4) Both 1 & 3.

Q. 101. When the elements Inductor and resistance are in parallel the branch current are : - (Grobs-Ed10-P652)

(1) In phase with applied voltage in resistive branch and 90 degree out of phase in inductive branch (2) Out of phase by 90 degree with applied voltage in resistive branch and 90 degree out of phase in inductive branch (3) In phase with applied voltage in resistive branch and inductive branch (4) AOA

Q. 102.

Q. 103. When the elements Inductor and resistance are in parallel the inductive reactance(Xl) and Resistance (R) are equal: - (Grobs-Ed10-P655)

(1) Their branch current are equal (2) Branch current have -90 degree phase angle (3) Branch current have -45 degree phase angle (4) Both 1 & 3.

Q. 104. When the elements Inductor and resistance are in parallel, the Il and Ir have : - (Grobs-Ed10-P655)

(1) Equal current (2) different current with 90 degree out of phase. (3) Same branch current with -90 degree phase angle (4) different current with -45 degree phase angle

Q. 105. When the elements Inductor and resistance are in parallel: - (Grobs-Ed10-P655)

(1) The total line current is 180 degree out of phase with voltage (2) The total line current has -theta degree (Negative phase angle) with voltage depending upon the value of reactance or resistance. (3) The total line current is 180 degree out of phase with voltage depending upon current (4) the total line current is 180 degree out of phase with induced voltage

Q. 106. When the elements Inductor and capacitor are in parallel: - (Grobs-Ed10-P715)

(1) The inductive current lags the parallel voltage by 90 degree (2) The Capacitive current leads the parallel voltage by 90 degree (3) Both 1 & 2. (4) The inductive and capacitive current is in phase with the parallel voltage by

Q. 107. When the elements Inductor and capacitor are in parallel and Xc is greater than Xl: - (Grobs-Ed10-P715)

(1) The resultant current lags the parallel voltage by 90 degrees. (2) The resultant current leads the parallel voltage by 90 degree (3) The resultant current is in phase the parallel voltage (4) The resultant current lags the parallel voltage by 180 degree

Q. 108. When the elements Inductor and capacitor are in parallel and Xl is greater than Xc : - (Grobs-Ed10-P715)

(1) The resultant current lags the parallel voltage by 90 degree (2) The resultant current leads the parallel voltage by 90 degree. (3) The resultant current is in phase the parallel voltage (4) the resultant current leads the parallel voltage by 180 degree

Q. 109. When Resonance occurs in series LCR circuit then: - (BLT-P540)

(1) Circuit possess minimum impedance (2) Circuit possess maximum impedance (3) Circuit possess minimum resistance (4) maximum applied voltage

Q. 110. When Resonance occurs in series LCR circuit, this circuit is also called: - (BLT-P540)

(1) Voltage resonance (2) Current resonance (3) Acceptor circuit (4) Both 1 & 3.

Q. 111. When Resonance occurs, the frequency at which it occurs is known as: - (BLT-P540)

(1) Resonant Voltage (2) Resonant frequency (3) Net reactance (4) Both 1 & 3.

Q. 112. When Resonance occurs in series LCR circuit the : - (BLT-P541)

(1) Net reactance is zero (2) Circuit impedance is minimum (3) Circuit current is maximum (4) AOA.

Q. 113. When Resonance occurs in series LCR circuit, the power dissipated is : - (BLT-P541)

(1) Maximum. (2) Normal (3) Minimum (4) same in all condition

Q. 114. MTCS In a parallel Resonance LCR circuit, the current circulates: - (BLT-P589)

(1) Between reactance's is maximum (2) also called current resonance (3) between reactance is maximum (4) both 1 & 2.

Q. 115. MTCS the parallel Resonance LCR circuit forms the basis of: - (BLT-P589)

(1) Tuned circuits in electronics. (2) Voltage divider (3) current filter circuit (4) both 2 & 3

Q. 116. MTCS In a parallel Resonance LCR circuit the: - (BLT-P589)

(1) The line Current minimum but is in phase with applied voltage. (2) The line Current is maximum but in phase with applied voltage (3) the line Current is minimum but out of phase with applied voltage (4) the line Current is minimum but is 180 degree out of phase with applied voltage ķ

Q. 117. MTCS In a parallel Resonance LCR circuit, the power factor is : - (BLT-P589)

(1) 0 .5 (2) 1 (3) 0.3 (4) either option 1 or 3 depending upon frequency

Q. 118. MTCS during the parallel Resonance LCR tuned circuit the: - (Grobs-Ed10-P793)

(1) Line Current is the minimum, but reactance current is the maximum. (2) The line Current is maximum and reactance current is also maximum (3) The line Current is minimum, but reactance current is minimum as well (4) The line Current is minimum but is 180 degree out of phase with applied voltage

Q. 119. In parallel Resonance LCR when R, C & L are parallel to each other, the: - (Grobs-Ed10-P793)

(1) LC circuit is called the tank circuit (2) Ability of LC circuit to supply sine wave form output (3) option 2 and is called the flywheel effect (4) AOA.

Q. 120. In parallel LCR when R, C & L are parallel, then above the resonant frequency, the: - (Grobs-Ed10-P793)

(1) Net line current is capacitive. (2) net line current is inductive (3) net line current is equal (4) AOA

Q. 121. The parallel Resonance a LCR circuit will have: -

(1) Current is maximum (2) Minimum Current (3) Called Rejecter circuit (4) both 2 & 3.

Q. 122. What is capacitive reactance of 400 Hz circuit with a capacitance of 50 MFD?

(1) 8 Ohms (2) 0.8 Ohms (3) 2 Ohms (4) 20 Ohms

Q. 123. Ferrite is a ---------- material having the ---------- properties: - (Module-3)

(1) Non-Magnetic, Paramagnetic. (2) Nonmetallic, Ferromagnetic. (3) Semiconductor, Ferromagnetic. (4) Silicon steel, Diamagnetic

Q. 124. Two magnets when brought near each other, they exhibit the force of: - (Module-3)

(1) product of their pole strength. (2) 1 & inversely to the square of distance. (3) 1 & attracted by force. (4) Attraction depends upon the power of magnets

Q. 125. Ideal transformer is whose: - (Module-3)

(1) Output is equal to input power. (2) Output is equal to input voltage. (3) output power is greater than input power. (4) output is less than input power

Q. 126. Coupling coefficient of transformer is always: - (Module-3)

(1) less than 1 but greater than 1 for autotransformer. (2) Less than 1 always. (3) Greater than 1 always. (4) Not sure

Q. 127. Inductive Coupling coefficient of inductor is expressed in: - (Module-3)

(1) Percentage from 0 to 100. (2) Fractional numbers between 0 to 1. (3) Digital Nos from 1 to 9. (4) between 0.5 to 1

Q. 128. If Inductive Coupling coefficient of inductor, where: - (Module-3)

(1) 0 indicates low coupling. (2) 0 Indicates high coupling. (3) 1 indicates loose coupling. (4) 0 Indicates no coupling

Q. 129. When current flows in a conductor the magnetic field around a conductor is represented by: -: - (Module-3)

(1) Series of concentric circles. (2) Overlapping circles. (3) Crisscross circles. (4) straight lines

Q. 130.

Q. 131. If the conductor is grasped in the left hand with thumb pointing in the direction of current flow the fingers wrapped around the conductor will be: -: - (Module-3)

(1) In the same direction as the lines of magnetic field. (2) In the opposite direction of as the lines of magnetic field. (3) Option 1 & known as Left Hand Rule. (4) Option 2 & is known as Right Hand Rule

Q. 131. In a current carrying conductor placing a soft iron core inside the coil will: -: - (Module-3)

(1) Increase the concentration of lines of force. (2) Option 1 & because the soft iron has greater permeability then air. (3) Option 1 & because the soft iron has lower permeability then air. (4) AOA

Q. 132. Addition of the soft iron core in a coil/wire loops: - (Module-3)

(1) Increase the concentration of lines of flux. (2) The magnetic flux is increased. (3) Both 1 & 2 (4) NOA

Q. 133. When DC flows in a coil the core will become-------- and polarity is determined by ---------- respectively: -: - (Module-3)

(1) Magnet, Left Hand Rule. (2) Magnet, Right Hand Rule. (3) DC Motor, Left Hand rule. (4) Coil, Left hand Rule

Q. 134. In LHR if coil is grasped in left hand the: -: - (Module-3 P 10.10)

(1) Finger Curve around the coil indicates the direction of current and The Thumb indicates the direction of North Pole. (2) Finger curve indicated the magnetic field & The Thumb indicates the direction of North Pole.

(3) Finger curve indicated the magnetic field & Thumb indicates the direction of South pole. (4) Finger curve indicates the current flow & The Thumb indicates the direction of magnetic field.

Q. 135. The strength of magnetic field can be increased by: -: - (Module-3 P 10.11)

(1) Increasing current in the coil. (2) Increasing the loop of wires. (3) Both 1,2 and Type of core material. (4) Increasing the thickness of wire & length of core

Q. 136. In an electromagnet, the soft iron piece will be: -: - (Module-3 P 10.11)

(1) Attracted by the North pole. (2) Attracted by South Pole. (3) Either 1 or 2. (4) Repelled by South pole and attracted by North pole

Q. 137. When a magnetizing force is applied to a piece of magnetic material a point is reached where no more lines of force can be induced, the material is said to be: -: - (Module-3 P 10.13)

(1) Saturated. (2) Magnetized. (3) Polarized. (4) Depolarized

Q. 138. A material that easily passes magnetic flux is said to have: -: - (Module-3 P 10.13)

(1) High Permeability. (2) Low Permeability. (3) High coercive force. (4) Reluctance

Q. 139. The primary aspect of the operation of coil is: -: - (Module-3 P 11.2)

(1) to oppose any change in current thru it. (2) Option 1 & is called Inductance. (3) Option 1 & is called reluctance. (4) To oppose change in voltage

Q. 140 In a series RL circuit the ---------- will increase to 63 % of its full value in one time constant after the circuit is closed: -: - (Module-3 P 11.3)

(1) Current. (2) Voltage. (3) Flux density. (4) Magnetic field

Q. 141. Doubling the number of turns in a coil will: -: - (Module-3 P 11.3)

(1) Double the inductance. (2) Double the Voltage. (3) Half the inductance. (4) No change in value

Q. 142. Doubling the length of a coil while keeping the same number of turns will: -: - (Module-3 P 11.3)

(1) Double the inductance. (2) Double the Voltage. (3) Halves the inductance. (4) No change in inductance value

Q. 143. The changing magnetic field around the conductor induces voltage across the coil and this EMF is called: -: - (Module-3 P 11.3)

(1) Inductance. (2) Self Inductance. (3) Mutual inductance. (4) NOA

Q. 144. When the inductors are connected in series the total inductance is: -: - (Module-3 P 11.4)

(1) Sum of individual inductors value. (2) Option 1 & the value of Inductance will be higher than the largest value of individual inductors. (3) Option 1 & the value of Inductance will be lower than the largest value of individual inductors. (4) Option 1 & the value of Inductance will be lower than the value of individual inductors.

Q. 145. When the inductors are connected in parallel the total inductance is: -: - (Module-3 P 11.4)

(1) Sum of individual inductors value. (2) Option 1 & the value of Inductance will be higher than the largest value of individual inductors. (3) The value of Inductance will be lower than the largest value of individual inductors. (4) The value of Inductance will be lower than the smallest value of individual inductors.