

## Physics ICS Part 2 Chapter 16 Online MCQ's Test

Sr	Questions	Answers Choice
1	The resonance frequency is given by:	A. $f_r = 2\pi\sqrt{LC}$ B. $f_r = 1/2\pi LC$ C. $f_r = 1/2\pi\sqrt{LC}$ D. $f_1 = 1/2\pi C\sqrt{L}$
2	The phase angle of a series RLC circuit at resonant frequency is	A. $1/2$ B. $\sigma$ C. Zero D. $\sigma/4$
3	In case of capacitor, the unit of reactance is	A. Farad B. Ohm C. Newton D. All of these
4	The reactance of inductor depends upon	A. L D. All of the above
5	When an inductor comes close to a metallic object, its inductance is.	A. Decreased B. Increased C. Becomes half D. Becomes 4 times
6	In a pure inductive A.C. circuit the current.	A. Lags behind voltage by $90^\circ$ B. Leads the voltage by $90^\circ$ C. In phase with voltage D. Leads the voltage by $270^\circ$
7	The unit of impedance is.	A. Henry B. Hertz C. Ampere D. Ohm
8	The power factor of RL series circuit is.	A. 0 B. 1 C. Less than 1 D. More than one
9	When 10 V are applied to an A.C circuit, the current flowing in it is 100 mA. Its impedance is.	A. 100 Ohm B. 10 Ohm C. 1000 Ohm D. 1 Ohm
10	For electromagnetic waves, Maxwell generalized	A. Gauss law for magnetism B. Gauss law for electricity C. Faradays law D. Amperes law
11	In frequency modulation, the amplitude of carrier waves is	A. Increases B. Remains constant C. Decreases D. None of these
12	The phase difference between current and voltage in an inductive circuit is.	A. zero B. $90^\circ$ C. $180^\circ$ D. $45^\circ$
13	The slope of q-t curve at any instant of time gives.	A. Voltage B. Current C. Charge D. Both a and b
14	The flow of D.C current is opposed by	A. Resistor B. Induction C. Capacitor D. All of these
15	$X_L =$	A. $2\pi fL$ B. $1/2\pi fL$ C. $2\pi fL$ D. $2\pi fL$

D.  $1L/2\pi$

16 In metal detector, we use.

- A. L-C circuit
- B. R-L circuit
- C. R-C circuit
- D. RLC series circuit

17 In RLC circuit the energy is dissipated in

- A. R only
- B. R and L
- C. R and C
- D. L and C

18  $X_C =$

- A.  $1/2\pi fc$
- B.  $2\pi fc$
- C.  $2\pi/fc$
- D.  $fc/2\pi$

19 Electron vibrating 94,000 times each second will produce radio waves of frequency.

- A. 94 Hz
- B. 940 HZ
- C. 94 Hz
- D. 490 Hz

20 In Series resonance circuit the impedance of circuit at resonance frequency, is

- A. Maximum
- B. Minimum
- C. It is unequal to R
- D. None of above