

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

Sr	Questions	Answers Choice
1	Power dissipation in A.C circuit is expressed as:	A. $P = I_{\text{rms}} \times V_{\text{rms}} \sin \theta$ B. $I V \cos \theta$ C. $I_{\text{rms}} \times V_{\text{rms}} \cos \theta$ D. $I_{\text{rms}} \times V_{\text{rms}} \sin 2\theta$
2	The phase angle of a series RLC circuit at resonant frequency is	A. $1/2$ B. $\sigma$ C. Zero D. $\sigma / 4$
3	$X_L =$	A. $2\pi f L$ B. $1/2\pi f L$ C. $2\pi f L$ D. $f L / 2\pi$
4	In RLC series circuit at resonance the phase difference between capacitor and inductor reactance is.	A. $90^\circ$ B. $270^\circ$ C. $0^\circ$ D. $180^\circ$
5	The wave form of alternating voltage is a	A. Cotangent curve B. Cosine curve C. Sine curve D. Tangent curve
6	The A.M. transmission frequencies range from	A. 540 KHz to 1000 KHz B. 540 KHz to 1600 KHz C. 520 KHz TO 1600 KHz D. 520 KHz TO 1400 KHz
7	The device which allows only the flow of D.C. is.	A. Capacitors B. transformer C. Inductor D. Generator
8	An inductor of 1 henry inductance has a reactance 500 ohms, then the frequency required is approximately	A. 50 Hz B. 100 Hz C. 80 Hz D. 120 Hz
9	In Pakistan the frequency of A.C. supply is.	A. 50 Hz B. 60 Hz C. 45 Hz D. 70 Hz
10	when an inductor comes close to a metallic object, its inductance is.	A. Decreased B. Increased C. Becomes half D. Becomes 4 times
11	In frequency modulation, the amplitude of carrier waves is	A. Increases B. Remains constant C. Decreases D. None of these
12	The flow of D.C current is opposed by	A. Resistor B. Induction C. Capacitor D. All of these
13	The most common source of an A.C. Voltage is.	A. Motor B. Cell C. Generator D. Thermo couple
14	In purely resistive A.C circuit, instantaneous value of voltage and current:	A. Current lags behind voltage B. Current leads voltage by $\pi/2$ C. Both are in Phase D. Voltage leads current by $\pi/2$

15	The natural frequency of L.C circuit is equal to	
16	The peak to peak value of alternating voltage is	<p>A. <math>2V_m</math></p> <p>B. <math>V_m</math></p> <p>D. None of these</p>
17	In AC system we generate sine wave form because:	<p>A. It can be easily drawn</p> <p>B. It produces least disturbance in electrical circuits</p> <p>C. It is nature standard</p> <p>D. Other waves cannot be produced easily</p>
18	In a pure inductive A.C. circuit the current.	<p>A. Lags behind voltage by <math>90^\circ</math></p> <p>B. Leads the voltage by <math>90^\circ</math></p> <p>C. In phase with voltage</p> <p>D. Leads the voltage by <math>270^\circ</math></p>
19	The phase difference between the current and voltage at resonance is:	<p>A. 0</p> <p>B. <math>\pi</math></p> <p>C. <math>-\pi</math></p> <p>D. <math>\pi/2</math></p>
20	The main use of A.C is	<p>A. Minimum line losses</p> <p>B. Long distance transmission</p> <p>C. Stepping up to required voltage only</p> <p>D. Stepping down to required voltage only</p>