

Physics ECAT Pre Engineering Chapter 16 Alternating Current Online Test

Sr	Questions	Answers Choice
1	When electrons in the transmitting antenna vibrate 94000 time per second, they produce radiowaves having frequency	A. 9.4 kHz B. 940 kHz C. 94 kHz D. None of these
2	In free space, the speed of electromagnetic waves is	A. $3 \times 10^8 \text{ ms}^{-1}$ B. $3 \times 10^6 \text{ ms}^{-1}$ C. $4 \times 10^7 \text{ ms}^{-1}$ D. $3 \times 10^9 \text{ ms}^{-1}$
3	Transmitting antenna emits	A. Magnetic waves B. Electric waves C. Electromagnetic waves D. Sound waves
4	Electromagnetic waves transmit energy equal to	A. $\frac{1}{2} mv^2$ B. $m^2 c^2$ C. hf/c D. hf
5	Which one of the following Electro-magnetic wave have the highest frequency and shortest wave-length	A. X-rays B. Ultraviolet rays C. y-rays D. Cosmic rays
6	Chock consumes externally small	A. Charge B. Current C. Power D. Potential
7	Which one of the following waves belongs to electromagnetic spectrum	A. Radio and TV waves B. Radar waves C. Micro waves D. All of them
8	In frequency modulation (FM), the carrier waves amplitude	A. Remains constant B. Increase C. Decreases D. None of these
9	If the value of C in a series RLC circuit is increased, the resonant frequency	A. Is not affected B. Increase C. Remains the same D. Decreases
10	The phase angle of a series RLC circuit at resonance is	A. 180° B. 90° C. 0° D. None of the these
11	The total reactance of a series RLC circuit at resonance is	A. zero B. Equal to the resistance C. Infinity D. Capacitive
12	SI unit of impedance is	A. hertz B. henry C. ampere D. ohms
		A. 0° B. 90°

13	In series RC circuit when $R=X_C$, then the phase angle is	size: small;">° C. 70° D. 45°
14	An A.C. voltage is applied across the inductor. When the frequency of the voltage is increased, the current	A. Decreases B. Increases C. Does not change D. Momentarily goes to zero
15	At resonance frequency the impedance of parallel resonance circuit is	A. Maximum B. Minimum C. Zero D. None of the above