

ECAT Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	The entire wave form of sinusoidal voltage is actually a set of all the:	A. Positive maximum value + V_{max} and negative maximum value $-V_{\text{max}}$ B. Positive maximum value + V_{max} and zero C. Zero and negative maximum value $-V_{\text{max}}$ D. Any of these E. None of these
2	The power factor of resonant series circuit is	A. 1 B. 0 C. -1 D. 0.5
3	An A.C. voltmeter read 250 volts. The frequency of alternating is 50 Hz, the peak value of voltage is	A. 3525.0 volts B. 35.35 volts C. 353.5 volts D. 3.535 volts
4	For the normal operation of the transistor, its	A. emitter-base and collector base junctions are forward biased B. emitter-base junction is reversed biased and collector base junction is forward biased C. emitter-base junction is forward biased and collector-base junction is reverse biased D. any one of these
5	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
6	In a transistor, if the central region is n-type, then this type of transistor is known as	A. n-p-n transistor B. p-n-p transistor C. either of these D. none of these
7	A sinusoidally alternating voltage or current can be graphically represented by a:	A. Vector B. Rotating vector C. Clockwise vector D. Anticlockwise voltage vector E. None of these
8	When a transistor is used as a switch the circuit in which the current is to be switched OFF and ON, is connected between the	A. base and emitter B. collector and emitter C. base and collector D. any one of these
9	A resonance curve for RLC series circuit is a plot of frequency versus	A. Voltage B. Current C. Impedance D. Reactance
10	An A.C varies as a function of	A. Current B. Voltage C. Time D. Charge
11	The value of current gain of n-p-n transistor is of the order of	A. tens B. hundreds C. thousands D. ten thousands
12	Most OP-AMP operates with	A. ± 6 V supply B. ± 10 V supply C. ± 12 V supply D. ± 24 V supply
13	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

14	In describing functions of digital systems, a closed switch will be shown as	A. 0 B. 1 C. low D. any one of these
15	Conversion of alternating current into direct current is called	A. amplification B. rectification C. conduction D. polarization
16	When the pn-junction is forward biased. the current flows through it is of the order of	A. milli-amperes B. amperes C. nano-amperes D. micro-amperes
17	When the pn-junction is connected reversed biased, its resistance is of the order of	A. few ohms B. few kilo-ohms C. few mega-ohms D. few mili-ohms
18	In frequency modulation (FM), the carrier waves amplitude	A. Remains constant B. Increase C. Decreases D. None of these
19	The value of the potential difference across the depletion region for the case of germanium is	A. 0.3 V B. 0.5 V C. 0.7 V D. 0.9 V
20	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