

ECAT Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	The time interval during which the Voltage source changes its polarity once is known as:	A. Time period T B. Half the time period C. Quarter the time period D. Two third of the time period E. None of these
2	A signal appears after amplification, at the output terminal with a phase shift of 180° , if it is applied at	A. inverting input B. non-inverting input C. any one of the input terminal D. none of them
3	The alternative voltage of current is actually measured by:	A. Its RMS value B. Square root of its mean square value C. Instantaneous value D. Peak value E. Both (A) and (B)
4	Chock consumes externally small	A. Charge B. Current C. Power D. Potential
5	In half wave rectification	A. both halves of the input voltage is used B. only one half of the input voltage is used C. either of these D. none of these
6	Which of the following diode is used to derive the current in external circuit when light is incident in the circuit	A. photo diode B. light emitting diode C. photo voltaic cell D. none of these
7	The length of rotating vector (on a certain scale) represents the:	A. Peak value of alternating quantity B. RMS value of alternating quantity C. Instantaneous value of alternating quantity D. Either (B) or (C) E. Either (A) or (B)
8	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. $3 \times 10^9 \text{ ms}^{-1}$
9	The Instantaneous value of alternative current maybe:	A. The same as its RMS value B. Greater than its Rms value C. The same as its peak value D. Any of these E. None of these
10	The sum of positive and negative peak values is called:	A. Instantaneous value B. Peak value C. Rms value D. Peak-to peak-value E. None of these
11	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
12	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
13	OP-AMP has the following input terminals	A. one B. two C. ..

		C. three D. four
14	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 $+V_{\text{max}}$ and zero C. Zero and negative maximum value $-V_{\text{max}}$ D. Any of these E. None of these
15	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
16	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
17	At resonance, the impedance of RLC series circuit is	A. Maximum B. Zero C. Minimum D. Determinate
18	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
19	The input resistance of the OP-AMP is the resistance between the	A. (-) input and output B. (+) input and output C. (-) and (+) inputs D. between any inputs
20	At higher frequency of the alternating current, the capacitive reactance X_C	A. Increases B. Decreases C. Remains the same D. Increases only when the voltage increases