

## ECAT Pre General Science Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	The bridge circuit of full wave rectification uses	A. one diode B. two diode C. three diode D. four diode
2	In RLC series circuit, resonance occurs when	A. X <sub>L &gt; Xc</sub> B. X <sub>L &lt; Xc</sub> C. X <sub>L = Xc</sub> D. None of these
3	In which of the following diodes when an electron combines with a hole during the forward biasing, photon of visible light is emitted.	A. photo diode B. light emitting diode C. photo voltaic cell D. all of them
4	The value of output resistance of OP-AMOP is of the order of	A. few ohms B. few hundred ohms C. several kilo ohms D. several mega ohms
5	The $R_1$ = infinity and $R_2$ = 0, then the gain of non-inverting amplifier is	A. zero B. infinity C. one D. any one of these
6	The power factor of resonant series circuit is	A. 1 B. 0 C1 D. 0.5
7	The phase angle of a series RLC circuit at resonance is	A. 180 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> B. 90 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> C. 0 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> D. None of the these
8	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)
9	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
10	The total reactance of a series RLC circuit at resonance is	A. zero B. Equal to the resistance C. Infinity D. Capacitive
11	The output voltage of half wave rectification is in the form of	A. a smooth curve B. a smooth wave C. pulses D. all of the above
12	Which of the following diodes can operate in the reverse biased condition	A. photo diode B. light emitting diode C. photo voltaic cell D. none of these
13	If 250V is the RMS value of alternative voltage, then its peak value $V_{\text{O}}$ will be:	A. 353.5V B. 250V C. 175V D. zero E. 400V
		A. A capacitor

14	The basic circuit element in D.C. circuit is:	B. A resistor C. An inductor D. Both (A) and (C) E. Both (A) and (B)
15	Alternating current can induce voltage because it has a	A. High peak value     B. Varying magnetic field     C. Stronger field than direct curren     D. Constant magnetic field
16	During the negative half-cycle of the half-wave rectification, the diode	A. does not conduct B. conducts C. either of these D. none of these
17	At higher frequency of the alternating current, the capacitive reactance $\mathbf{X}_{\mathbf{C}}$	A. Increases B. Decreases C. Remains the same D. Increases only when the voltage increases
18	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
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	The basic circuit element in A.C. circuits are:	A. Resistor and capacitor B. Resistor and Inductor C. Capacitor only D. Both (B) and (C) E. None of these