

ECAT Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	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
2	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
3	Which of the following has a great concentration of impurity	A. base B. emitter C. collector D. none of these
4	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
5	The total reactance of a series RLC circuit at resonance is	A. zero B. Equal to the resistance C. Infinity D. Capacitive
6	If we connect a A.C. volt meter to read A.C. voltage, It would read its:	A. RMS value B. Instantaneous value C. Valued average over a cycle D. Zero E. Both (B) and (C)
7	In a transistor, the central region is called	A. collector B. emitter C. base D. none of them
8	Most OP-AMP operates with	A. 6 V supply B. 10 V supply C. 12 V supply D. 24 V supply
9	Electromagnetic waves transmit energy equal to	A. $1/2\text{ mv}^2$ B. $m\omega^2c^2$ C. hf/c D. hf
10	Which one of the following is correct?	A. $V_o = 1.414 V_{rms}$ B. $I_{oams} = 1.414 I_{rms}$ C. $V_o = 10.70\text{ V}_{rms}$ D. Both a and b
11	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
12	In a normally biased n-p-n transistor, an electron current I_E flows from the	A. emitter into the base B. collector into the base C. base into collector D. none of these
13	When the emitter-base junction of a transistor is reverse biased, collector current	A. Reverses B. Increases C. Decreases D. Stops
14	In an A.C circuit with resistor only. the current and voltage have a phase angle of	A. 90° B. 0°

		<small>size: small;">> C. 180> D. none of these</small>
15	Which of the following diodes can operate in the reverse biased condition	<small>A. photo diode B. light emitting diode C. photo voltaic cell D. none of these</small>
16	The value of output resistance of OP-AMOP is of the order of	<small>A. few ohms B. few hundred ohms C. several kilo ohms D. several mega ohms</small>
17	The RMS value of alternating current is:	<small>A. 0.7 times at the peak value B. 0.5 times the peak value C. 0.7 times the Instantaneous value D. Equal to maximum voltage E. None of these</small>
18	Which of the following diode is used for the detection of light	<small>A. photo diode B. light emitting diode C. photo voltaic cell D. all of them</small>
19	To design a resonant circuit of frequency 100 KHz with an inductor of inductance 5 mH, we need a capacitor of capacitance	<small>A. 5.07 pF B. 50 pF C. 0.507 pF D. 507 pF</small>
20	The bridge circuit of full wave rectification uses	<small>A. one diode B. two diode C. three diode D. four diode</small>