

ECAT Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	At resonance, the impedance of RLC series circuit is	<p>A. Maximum B. Zero C. Minimum D. Determinate</p>
2	The magnitude of alternative voltage V:	<p>A. Always increase B. Always decrease C. Remains constant D. Does not remain constant E. None of these</p>
3	The value of current gain of n-p-n transistor is of the order of	<p>A. tens B. hundreds C. thousands D. ten thousands</p>
4	A signal appears after amplification, at the output terminal with a phase shift of 180° , if it is applied at	<p>A. inverting input B. non-inverting input C. any one of the input terminal D. none of them</p>
5	The phase at the positive peak of an A.C. cycle is:	<p>A. 0° B. 90° C. 180° D. 0 and π E. $\pi/2$ and $3\pi/2$</p>

6	Peak value of alternative current is:	A. one of its Instantaneous value B. Equal to its RMS value C. The same as its peak-to-peak value D. Both (B) and (C) E. 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	In a normally biased n-p-n transistor, an electron c current I _e flows from the	A. emitter into the base B. collector into the base C. base into collector D. none of these
9	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
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	Alternating current can be transmitted:	A. To long distance B. At very high cost C. At very low cost D. Both (A) and (C) E. Both (A) and (B)
12	Unless stated otherwise, when we speak of A.C. meter reading, we usually mean:	A. Peak value B. RMS value C. Instantaneous value D. Peak-to-peak value E. Both (A) and (C)
13	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
14	In RLC series circuit, resonance occurs when	A. $X_L > X_C$ B. $X_L < X_C$ C. $X_L = X_C$ D. None of these
15	Which one of the following is correct?	A. $V_o = 1.414 V_{rms}$ B. $I_o = 1.414 I_{rms}$ C. $V_o = 10.70 V_{rms}$ D. Both a and b
16	The emitter-base junction of a transistor is forward-biased and collector-base junction is reverse-biased. If the base current is increased, its	A. I_c will decrease B. V_{CE} will increase C. I_c will increase D. V_{CC} will increase
17	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
18	The circuit which is used to smooth the output voltage of the full-wave rectification is known as	A. transformer B. rectifier C. filter D. none of these
19	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
20	The total reactance of a series RLC circuit at resonance is	A. zero B. Equal to the resistance

- C. Infinity
 - D. Capacitive
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