

ECAT Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	In a transistor, the central region is called	A. collector B. emitter C. base D. none of them
2	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
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	Due to the high value of the input resistance, practically, the value of the current which flows between the input terminals is	A. zero B. small C. large D. very large
5	The device which allows only the flow of an A.C. through a circuit is	A. Capacitor B. Inductor C. D.C. motor D. Battery
6	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
7	Nowadays, Most of the electric energy is produced by the A.C. generators using:	A. Hydal water B. Geothermal energy C. Solar energy D. Biomass E. Both (B) and (D)
8	In which of the following components, pn-junction is used	A. light emitting diode B. photo diode C. photo voltaic cell D. all of these
9	When the emitter-base junction of a transistor is reverse biased, collector current	A. Reverses B. Increases C. Decreases D. Stops
10	During each cycle, alternating voltage reaches a peak value	A. One time B. Two times C. Four times D. A number of times depending on the frequency
11	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. $3 \times 10^9 \text{ ms}^{-1}$
12	In a transistor, if the central region is p-type then this type of transistor is known as	A. p-n-p transistor B. n-p-n transistor C. either of these D. none of these
		A. 0

13	In series RC circuit when $R=X_C$, then the phase angle is	<p>84); font-family: arial, sans-serif; font-size: small;">></p> <p>B. 90</p> <p>C. 70</p> <p>D. 45</p>
14	The value of the potential difference across the depletion region for the case of germanium is	<p>A. 0.3 V</p> <p>B. 0.5 V</p> <p>C. 0.7 V</p> <p>D. 0.9 V</p>
15	Mathematical manipulation of the two quantized states can be best carried if they are represented by	<p>A. high - low</p> <p>B. yes - no</p> <p>C. on - off</p> <p>D. 0 - 1</p>
16	The impedance of RLC series resonance circuit at resonant frequency is	<p>A. Greater than R</p> <p>B. Equal to R</p> <p>C. Less than R</p> <p>D. None of these</p>
17	The r.m.s. value of alternating current is equal to its maximum value at angle of	<p>A. 60</p> <p>B. 45</p> <p>C. 30</p> <p>D. 90</p>
18	A resonance curve for RLC series circuit is a plot of frequency versus	<p>A. Voltage</p> <p>B. Current</p> <p>C. Impedance</p> <p>D. Reactance</p>
19	The waveform of alternating voltage is a:	<p>A. Square</p> <p>B. Rectangular</p> <p>C. Saw-tooth</p> <p>D. Sinusoidal</p> <p>E. None of these</p>
20	SI unit of impedance is	<p>A. hertz</p> <p>B. henry</p> <p>C. ampere</p> <p>D. ohms</p>