

ECAT Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	The output voltage of half wave rectification is in the form of	<p>A. a smooth curve B. a smooth wave C. pulses D. all of the above</p>
2	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>
3	If we connected the ordinary DC ammeter to measure alternating current, it would measure its:	<p>A. Instantaneous value B. RMS value C. Value averaged over a cycle D. Either (B) or (C) E. Either (A) or (C)</p>

4	The most common source of alternating voltage is:	A. Motor B. Transformer C. AC generator D. Both (A) and (C) E. Both (A) and (B)
5	The amplifier which is used to perform mathematical operations electronically is known as	A. calculator B. OP-AMP C. computer D. any one of them
6	Which of the following diode is used for the detection of light	A. photo diode B. light emitting diode C. photo voltaic cell D. all of them
7	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
8	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
9	A digital system deals with quantities or variables which have	A. only one state B. only two discrete states C. three discrete states D. four discrete states
10	A p-n junction is formed when a crystal of silicon is grown in such a way that its one half is doped with trivalent impurity and the other half with a impurity from	A. 2nd group B. fourth group C. fifth group D. sixth group
11	When the emitter-base junction of a transistor is reverse biased, collector current	A. Reverses B. Increases C. Decreases D. Stops
12	At resonance, the phase angle for RLC series resonance circuit equals	A. 0° B. 90° C. 180° D. 270°
13	Most OP-AMP operates with	A. 6 V supply B. 10 V supply C. 12 V supply D. 24 V supply
14	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
15	When either L or C is increased, the resonant frequency of the RLC series circuit	A. Increases B. Decreases C. Remains the same D. Becomes zero
16	The value of the input resistance of OP-AMP is of the order of	A. few ohms B. few hundred ohms C. several kilo ohms D. several mega ohms
17	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
18	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
19	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)

20

The basic circuit element in D.C. circuit is:

A. A capacitor
B. A resistor
C. An inductor
D. Both (A) and (C)
E. Both (A) and (B)