

## ECAT Pre General Science Physics Chapter 16 Alternating Current

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Sr	Questions	Answers Choice
1	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
2	A signal appears after amplification, at the output terminal with a phase shift of $180^\circ$ , if it is applied at	A. inverting input B. non-inverting input C. any one of the input terminal D. none of them
3	For a n-p-n transistor, the conventional current equation can be written as	A.   <sub>E&lt; sub&gt;+  <sub>C&lt; sub&gt;=  <sub>B&lt; sub&gt; B&lt; sub&gt; B&lt; sub&gt;-  <sub>+  <sub>B&lt; sub&gt;=  <sub>E&lt; sub&gt;=  <sub>E&lt; sub&gt;+  <sub>B&lt; sub&gt;=  <sub>E&lt; sub&gt;+  <sub>B&lt; sub&gt;=  <sub>E&lt; sub&gt;+  <sub>E&lt; sub&gt;=  <sub>E&lt; sub&gt;+  <sub>E&lt; sub&gt;=  <sub>E&lt; sub&gt;+  <sub>E&lt; sub&gt;=  <sub>E&lt; sub&gt;+  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub>=  <sub>E&lt; sub&gt;=  <sub< td=""></sub<></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub></sub>
4	The amplifier which us used to perform mathematical operations electronically is known as	A. calculator B. OP-AMP C. computer D. any one of them
5	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 <sub>c</sub> will decrease B. V <sub>CE</sub> will increase C. I <sub>C</sub> will increase D. V <sub>CC</sub> will increase
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	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
8	In an A.C circuit with resistor only, the current and voltage have a phase angle of	A. 90 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> B. 0 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> C. 180 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> D. none of these
9	A P-N juction or semiconductor diode cannot be used as	A. A rectifier B. Detector C. Oscillator D. An amplifier
10	At resonance, the impedance of RLC series circuit is	A. Maximum B. Zero C. Minimum D. Determinate
11	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 maga ohms
12	Conversion of alternating current into direct current is called	A. amplification B. rectification C. conduction D. polarization
13	When the pn-junction is in reversed biased, current flows through the junction due to the	A. majority carriers B. minority carriers C. either of them D. none of them

14	The length of rotating vector (on a certain scale) represents the:	A. Peak value of alternating quantity B. RMS value of alternating quantity C. Instantaneous value of alternating quantity D. Either (B) or (C) E. Either (A) or (B)
15	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
16	Chock consumes externally small	A. Charge B. Current C. Power D. Potential
17	The input resistance of the OP-AMP is the resistance between the	A. (-) input and output B. (+) input and output C. (-) and (+) inputs D. between any inputs
18	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
19	Unless stated otherwise, when we speak of A.C. meter reading, we usualy mean:	A. Peak value B. RMS value C. Instantaneous value D. Peak-to-peak value E. Both (A) and (C0
20	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