

## Physics ECAT Pre Engineering Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	An A.C. voltmeter read 250 volts. The frequency of alternating is 50 Hz, the peak value of voltage is	A. 3525.0 volts B. 35.35 volts C. 353.5 volts D. 3.535 volts
2	The open loop gain of OP-AMP is of the order of	A. 10 <sup>2</sup> B. 10 <sup>3</sup> C. 10 <sup>4</sup> D. 10 <sup>5</sup>
3	If 250V is the RMS value of alternative voltage, then its peak value $V_{\text{O}}$ will be:	A. 353.5V B. 250V C. 175V D. zero E. 400V
4	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
5	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)
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	For normal operation of transistor, the batteries	A. V <sub>CC</sub> is of much lower value than V <sub>BB</sub> B. V <sub>CC</sub> is of much higher value than V <sub>BB</sub> C. V <sub>CC is equal to</sub> V <sub>BB</sub> D. none of these
8	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
9	In a transistor, if the central region is n-type, then this type of transistor is known as	A. n-p-n transistor B. p-n-p transistor C. either of these D. none of these
10	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
11	At resonance frequency the impedance of parallel resonance circuit is	A. Maximum B. Minimum C. Zero D. None of the above
12	The basic circuit elements of A.C circuit are	A. Resistor B. Inductor C. Capacitor D. All the three
13	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
14	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
15	The phase angle of a series RLC circuit at resonance is	A. 180 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> B. 90 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> C. 0 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> D. None of the these
16	SI unit of impedance is	A. hertz B. henry C. ampere D. ohms
17	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
18	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
19	In free space, the speed of electromagnetic waves is	A. 3 x 10 <sup>8</sup> ms <sup>- 1</sup> B. 3 x 10 <sup>6</sup> ms <sup>- 1</sup> C. 4 x 10 <sup>7</sup> ms <sup>- 1</sup> D. 3 x 10 <sup>9</sup> ms <sup>- 1</sup> D. 3 x 10 <sup>9</sup> ms <sup>- 1</sup>
20	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)