ECAT Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	SI unit of impedance is	A. hertz B. henry C. ampere D. ohms
2	When the pn-junction is forward biased. the current flows through it is of the order of	A. mili-amperes B. amperes C. nano-amperes D. micro-amperes
3	In an A.C circuit with resistor only, the current and voltage have a phase angle of	A. $90°$ B. $0°$ C. $180°$ D. none of these
4	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
5	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
6	OP-AMP has the following input terminals	A. one B. two C. three D. four
7	When the p-n junction is forward biased its resistance is of the order of	A. few mega ohms B. few kilo ohms C. few ohms D. few milli ohms
8	A diode characteristic curve is a plot between	A. current and time B. voltage and time C. voltage and current D. forward voltage and reversed voltage
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	In frequency modulation (FM), the carrier waves amplitude	A. Remains constant B. Increase C. Decreases D. None of these
11	Average value of A.C voltage during one cycle is	A. 1 B. Zero C. Maximum D. Variable
12	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
13	The impedance of RLC series resonance circuit at resonant frequency is	A. Greater than R B. Equal to R C. Less than R D. None of these
		A. +6 V supply

14	Most OP-AMP operates with	B. <u>+</u> 10 V supply C. <u>+</u> 12 V supply D. <u>+</u> 24 V supply
15	In series RC circuit when $R = X_C$, then the phase angle is	A. $0°$ B. $90°$ C. $70°$ D. $45°$
16	The power factor of resonant series circuit is	A. 1 B. 0 C. -1 D. 0.5
17	The wave form of alternating voltage is the graph between:	A. Voltage across X-axis and time across y-axis B. Current and time C. Voltage along y-axis and time along x-axis D. Voltage and current E. Either (B) or (D)
18	Which one of the following is correct?	A. $V_o = 1.414 \, V_{rms}$ B. $I_{ams} = 1.414 \, I_o$ C. $VO = 10.70 \, Vrms$ D. Both a and b
19	At resonance, the phase angle for RLC series resonance circuit equals	A. $0°$ B. $90°$ C. $180°$ D. $270°$
20	For a n-p-n transistor, the conventional current equation can be written as	A. $I_E + I_C = I_B$ B. $I_C - I_B = I_E$ C. $I_C + I_B = I_E$ D. $I_B + I_E = I_C$