ECAT Pre General Science Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	When a transistor is used as a switch the circuit in which the current is to be switched OFF and ON, is connected between the	A. base and emitter B. collector and emitter C. base and collector D. any one of these
2	The phase angle of a series RLC circuit at resonance is	A. 180° B. 90° C. 0° D. None of the these
3	Which one of the following Electro-magnetic wave have the highest frequency and shortest wave-length	A. X-rays B. Ultraviolet rays C. y-rays D. Cosmic rays
4	When the pn-junction is connected reversed biased, its resistance is of the order of	A. few ohms B. few kilo-ohms C. few mega-ohms D. few mili-ohms
5	In n-p-n transistor, emitter base junction is kept	A. reversed B. forward biased C. may be reversed or may be forward biased D. none of these
6	The basic circuit elements of A.C circuit are	A. Resistor B. Inductor C. Capacitor D. All the three
7	An A.C varies as a function of	A. Current B. Voltage C. Time D. Charge
8	In a normally biased n-p-n transistor, an electron c current $I_E$flows from the	A. emitter into the base B. collector into the base C. base into collector D. none of these
9	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
10	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)
11	The total reactance of a series RLC circuit at resonance is	A. zero B. Equal to the resistance C. Infinity D. Capacitive
12	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
13	In an A.C circuit with resistor only, the current and voltage have a phase angle of	A. 90° B. 0° C. 180<span style="color: rgb(84, 84,

		84); font-family: arial, sans-serif; font-size: small;">° D. none of these
14	The open loop gain of OP-AMP is of the order of	A. 10² B. 10³ C. 10⁴ D. 10⁵
15	The r.m.s. value of alternating current is equal to its maximum value at angle of	A. 60° B. 45° C. 30° D. 90°
16	SI unit of impedance is	A. hertz B. henry C. ampere D. ohms
17	In describing functions of digital systems, a closed switch will be shown as	A. 0 B. 1 C. low D. any one of these
18	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
19	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
20	The entire wave form of sinusoidal voltage is actually a set of all the:	A. Positive maximum value + V_oand negative maximum value -V_o B. Posiotive maximum value +V_oand zero C. Zero and negative maximum value -V_o D. Any of these E. None of these