

ECAT Pre General Science Physics Chapter 16 Alternating Current

Sr	Questions	Answers Choice
1	In RLC series circuit, resonance occurs when	A. X _{L > Xc} B. X _{L < Xc} C. X _{L = Xc} D. None of these
2	The entire wave form of sinusoidal voltage is actually a set of all the:	A. Positive maximum value + V _o and negative maximum value -V _o B. Posiotive maximum value +V _o and zero C. Zero and negative maximum value -V _o D. Any of these E. None of these
3	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
4	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
5	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
6	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
7	The power factor of resonant series circuit is	A. 1 B. 0 C1 D. 0.5
8	The bridge circuit of full wave rectification uses	A. one diode B. two diode C. three diode D. four diode
9	Alternating current is produced by a voltage source which polarity:	A. Remains the same B. Reverse after period T C. Keeps on reversing with time D. Reverse after every time interval T/2 E. Both (C) and (D)
10	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
11	If we connected the ordinary DC ammeter to measure alternating current, it would measure its:	A. Instantaneous value B. RMS value C. Value averaged over a cycle D. Either (B) or (C) E. Either (A) or (C)
12	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
13	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
		A. current and time B. voltage and time

14	A diode characteristic curve is a plot between	C. voltage and current D. forward voltage and reversed voltage
15	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
16	For normal operation of transistor, the batteries	A. V _{CC} is of much lower value than V _{BB} B. V _{CC} is of much higher value than V _{BB} C. V _{CC is equal to} V _{BB} D. none of these
17	A P-N juction or semiconductor diode cannot be used as	A. A rectifier B. Detector C. Oscillator D. An amplifier
18	During the positive half-cycle in the half-wave rectification,the diode	A. does not conduct B. conducts C. either of these D. neither of these
19	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 _c will decrease B. V _{CE} will increase C. I _C will increase D. V _{CC} will increase
20	In free space, the speed of electromagnetic waves is	A. 3 x 10 ⁸ ms ⁻¹ B. 3 x 10 ⁶ ms ⁻¹ C. 4 x 10 ⁷ ms ⁻¹ D. 3 x 10 ⁹ ms ⁻¹