ECAT Pre General Science Physics Chapter 16 Alternating Current Online Test

Sr	Questions	Answers Choice
1	The basic circuit element in D.C. circuit is:	A. A capacitor B. A resistor C. An inductor D. Both (A) and (C) E. Both (A) and (B)
2	The basic circuit element in A.C. circuits are:	A. Resistor and capacitor B. Resistor and Inductor C. Capacitor only D. Both (B) and (C) E. None of these
3	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
4	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)
5	A sinusoidally alternating voltage or current can be graphically represented by a:	A. Vector B. Rotating vector C. Clockwise vector D. Anticlockwise voltage vector E. None of these
6	If 250V is the RMS value of alternative voltage, then its peak value V_o will be:	A. 353.5V B. 250V C. 175V D. zero E. 400V
7	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)
8	The phase at the positive peak of an A.C. cycle is:	A. $0°$ B. $90°$ C. $180°$

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D. 0 andﻟ
E. ﻟ/2 and 3 ﻟ/2

9	The alternative voltage of current is actually measured by:	A. Its RMS value B. Square root of its mean square value C. Instantaneous value D. Peak value E. Both (A) and (B)
10	The magnitude of alternative voltage V:	A. Always increase B. Always decrease C. Remains constant D. Does not remain constant E. 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 RMS value of alternating current is:	A. 0.7 times at the peak value B. 0.5 times the peak value C. 0.7 times the Instantaneous value D. Equal to maximum voltage E. None of these
13	The Instantaneous value of alternative current maybe:	A. The same as its RMS value B. Greater than its Rms value C. The same as its peak value D. Any of these E. None of these
14	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
15	The sum of positive and negative peak values is called:	A. Instantaneous value B. Peak value C. Rms valuie D. Peak-to peak-value E. None of these
16	The highest value reached by the voltage or current:	A. In quarter cycle is called Instantaneous value B. In half cycle is called peak-to-peak value C. In one cycle is called peak value D. In half cycle is called Instantaneous value E. None of these
17	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
18	The waveform of alternating voltage is a:	A. Square B. Rectangular C. Saw-tooth D. Sinusoidal E. None of these
19	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)
20	The most common source of alternating voltage is:	A. Motor B. Transformer C. AC genrator D. Both (A) and (C) E. Both (A) and (B)
21	The time interval during which the Voltage source changes its polarity once is known as:	A. Time period T B. Half the time period C. Quarter the time period D. Two third of the time period E. None of these
22	Nowadays, Most of the electric energy is produced by the A.C. generators using:	A. Hydal water B. Geothermal energy C. Solar energy D. Biomass E. Both (B) and (D)
23	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)
24	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)
25	A P-N juction or semiconductor diode cannot be used as	A. A rectifier B. Detector C. Oscillator D. An amplifier
26	In describing functions of digital systems, a closed switch will be shown as	A. 0 B. 1 C. low D. any one of these
27	Mathematical manipulation of the two quantized states can be best carried if they are represented by	A. high - low B. yes - no C. on - off D. 0 - 1
28	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
29	Most OP-AMP operates with	A. $+$ 6 V supply B. $+$ 10 V supply C. $+$ 12 V supply D. $+$ 24 V supply
30	The R_1= infinity and R_2= 0, then the gain of non-inverting amplifier is	A. zero B. infinity C. one D. any one of these