ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	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
2	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)
3	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
4	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
5	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)
6	The phase at the positive peak of an A.C. cycle is:	A. 0º <o:p></o:p> <o:p></o:p> B. 90º <o:p></o:p> C. 180º <o:p></o:p> D. 0 and<span style="font-size:12.0pt;line-height:107%; font-family:"Plantagenet Cherokee","serif";mso-fareast-font-family:Calibri; mso-fareast-theme-font:minor-latin;mso-bidi-font-family:"Times New Roman"; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">د E. <span style="font-size:12.0pt;line-

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7	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)
8	The magnitude of alternative voltage V:	A. Always increase B. Always decrease C. Remains constant D. Does not remain constant E. None of these
9	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)
10	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
11	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
12	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
13	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
14	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
15	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
16	The waveform of alternating voltage is a:	A. Square B. Rectangular C. Saw-tooth D. Sinusoidal E. None of these
		A. Voltage across X-axis and time across y-axis

17	The wave form of alternating voltage is the graph between:	B. Current and time C. Voltage along y-axis and time along x-axis D. Voltage and current E. Either (B) or (D)
18	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)
19	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
20	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)
21	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)
22	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)
23	The direction of induced current is always so as to oppose the cause which produces it. This is	A. Lenz's law B. Ampere's law C. Faraday's law D. Coulomb's law E. None of these
24	Faraday's law of electromagnetic induction has been used in the construction of:	A. Galvanometer B. Voltmeter C. Electric motor D. Electric genrator E. Commutator
25	The law of electromagnetic induction is related to:	A. Coulomb B. Ampere C. Faraday D. Lenz E. None of these
26	The rate change of area expressed is expressed in:	A. None of these B. ms⁻¹ C. m²s⁻² D. ms⁻² E. m²s⁻¹
27	Plan of a coil makes an angle of 20^{o} with the lines of magnetic field. The angle between B and vector area of plane of coil is:	A. Also 20º <o:p></o:p> B. 70º <o:p></o:p> C. 90º <o:p></o:p> D. 180<span style="font-family: "Times New Roman", serif;

		font-size: 12pt; text-align: justify;">º <o:p></o:p> E. None of these
28	A square loop of wire is moving through a uniform magnetic field. The normal to the loop is oriented parallel to the magnetic field. The emf induced in the loop is:	A. Zero B. Of smaller magnitude C. Of larger magnitude D. Sometimes B, sometimes C E. Neither of these
29	A metal road of length 1m is moving at a speed of 1 ms^{-1}In a direction making angle of 30º with 0.5 Y magnetic field. The emf produced in the rod is:	A. 0.25 N B. 0.25 V C. 2.5 V D. 2.5 N E. 25 V
30	Motional emf is called motional:	A. Electromagnetic force and is measured in newtons B. Electromotive force and is measured in volt C. Electromotive force and is measured in newtons D. Electromagnetic force and is measured in volts E. None of these