

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The emission of electrons from a metal surface when exposed to light of suitable frequency is called the	A. pair production B. Compton effect C. photoelectric effect D. relativity
2	An electronic computer is basically a vast arrangement of electronic switches which are made from	A. Resistors B. Transistors C. N -type crystals D. P-Type crystals E. Capacitors
3	The example/s of non-electrical energy to electrical is/are:	A. Chemical energy Mechanical energy Heat energy Both (A) and (B) All of these Correct Answer: C
4	If we increase the length of a simple pendulum four times, its time period will become	A. 2 times B. 3 times C. 4 times D. 6 times
5	If a liquid is heated in weightlessness, the heat is transmitted through	A. Conduction B. Convection C. Radiation D. Neither, because the liquid cannot be heated in weightlessness
6	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
7	Xerography means:	A. Dry writing B. Wet writing C. Poor writing D. None of these

		size: 12.0pt; line-height: 107%; font-family: "Times New Roman"; " serif" >Excellent writing</p></p> E. <p class="MsoNormal">Both (A) and (B)</p>
8	During each cycle, alternating voltage reaches a peak value	A. One time B. Two times C. Four times D. A number of times depending on the frequency
9	Davison and Germer performed experiment to verify	A. de-Broglie hypothesis B. theory of relativity C. Newton's law of gravitation D. Mass-energy relation
10	Marie curie and Pierre curie discovered:	A. Uranium B. Polonium C. Radium D. Both (A) and (C) E. Plutonium
11	Carnot heat engine only used	A. isothermal processes B. adiabatic processes C. both of them D. none of them
12	Which one of the following relations is correct?	A. $1 \text{ Wb-m}^2 = \text{Nm}$ B. $1 \text{ tesla} = 104 \text{ gauss}$ C. $1 \text{ Wb-m}^2 = 1 \text{ tesla}$ D. All of the above
13	In metallic crystals which of the following thing remains constant	A. amplitude of oscillations B. temperature of solid C. average atomic positions D. all of them
14	Electric field strength is defined as	A. Work done on unit charge B. Force exerted on unit charge C. Distance covered by unit charge D. Power exerted by unit charge E. None of these
15	In full wave rectification, simultaneous action is that:	A. Two diodes conduct and two do not. B. One diode conduct and three do not. C. Three diodes conduct and one does not. D. All the four diodes conduct E. None of these
16	A sheet of aluminium foil of negligible thickness is introduced between the plates of a capacitor. The capacitance of the capacitor	A. Increases B. Decreases C. Remain unchanged D. Becomes infinite
17	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
18	A parallel plate capacitor is first charged and then a dielectric slab is introduced between the plates. The quantity that remains unchanged is	A. Charge Q B. Potential V C. Capacity D. Energy U
19	Terminal velocity is the maximum velocity attained by a spherical droplet when the drag force _____ the weight of droplet:	A. Is smaller than B. Is greater than C. Becomes equal to D. None of these
		A. <p class="MsoNormal" style="text-align: justify">Always accompanied</p> B. <p class="MsoNormal" style="text-align: justify">Sometimes accompanied</p> C. <p class="MsoNormal" style="text-align: justify">Sometimes accompanied</p> D. <p class="MsoNormal" style="text-align: justify">Sometimes accompanied</p>

The passage of current is accompanied by a magnetic field in the surrounding space:

line-height: 107%;font-family:"Times New Roman","serif",">Never accompanied<o:p></o:p></p>
D. Any of above<p class="MsoNormal" style="text-align: justify">
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E. <p class="MsoNormal" style="text-align: justify">None of these<o:p></o:p></p>