Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The basic circuit element in a d.c. circuit is a/an	A. Inductor B. Resistor C. Capacitor D. Battery
2	When sound waves travel from air to water which of these remains constant?	A. Velocity B. Frequency C. Wavelength D. All the above
3	In a Milikian's oil drop experiment the charge on an oil drop is calculated to be 6.35 x 10^{-19}C. The number of excess electrons on the drop is	A. 3.9 B. 4 C. 4.2 D. 6
4	Density is defined as:	A. Mass per volume B. Volume per mass C. Mass x volume D. Mass per length
5	When heat is added into the system then change in entropy is	A. negative B. positive C. zero D. any one of them
6	The most abundant isotope of neon is	A. neon-20 B. neon-21 C. neon-22 D. neon-23
7	The excess (equal in number) of electrons that must be placed on each of two small spheres spaced 3 cm apart, with force of repulsion between the spheres to be 10^{-19}N, is	A. 25 B. 225 C. 625 D. 1250
8	The results of mechanical tests are usually expressed in terms of	A. stress B. strain C. stress and strain D. neither strees nor strain
9	Work done in lower and bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
10	Electromagnetic waves transport:	A. Energy only B. Momentum only C. Both A and B are correct D. None of is correct
11	Two projectiles are fired from the same point with the same speed at angles of projection 60° and 30° respectively. Which one of the following is true?	A. Their range will be same B. Their maximum height will be same C. Their landing velocity will be same D. Their time of flight will be same
12	An object is dropped from a height of 100 m. Its velocity at the moment it touches the ground is:	A. 100 m/sec B. 140 m/sec C. 1960 m/sec D. 196 m/sec
13	Back emf is produced due to	A. Self induction B. Mutual induction C. A.C D. Lenz's law
14	Free electrons are	A. tightly bound B. fixed C. loosely bound D. tightly fixed
		A. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:"Times New

15	The rate at which the free electrons pass through any section of a metallic wire from right to left is:	Roman","serif"">Greater than the speed at which they pass from left to right<o:p></o:p> B. Less than the speed at which they pass from left to right<o:p></o:p> C. The same speed at which they pass from left to right<o:p></o:p> D. Any of above<o:p></o:p> E. None of them<o:p></o:p>
16	The concept of electric field theory was introduced by	A. Michael Faraday B. Newton C. Dalton D. Kepler E. Einstein
17	Rate of decay is actually described by.	A. Half line B. Decay constant C. Mean life D. Total life E. None of these
18	For a body executing S. H. M, its	A. momentum remains constant B. potential energy remains constant C. kinetic energy remains constant D. total energy remains constant
19	Electromagnetic -radiation means:	A. Photons B. protons C. Electrons D. Mesons E. None of these
20	In a charged capacitor the energy is stored in	A. Both in positive and negative charges B. Positive charges C. The edges of the capacitor plates D. The electric field between the plates