Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Which of the following does not obey ohm's law?	A. Copper B. Al C. Diode D. None
2	The speed of sound in a medium depends on	A. The elastic property but not on the inertia property B. The inertia property but not on the elastic property C. The elastic property as well as the inertia property D. Neither the elastic property nor the inertia property
3	Two metal rods A and B have their initial lengths in the ratio 2 : 3 and coefficients of linear expansion in the ratio 4 : 3. When they are heated through same temperature difference the ratio of their linear expansion is	A. 1 : 2 B. 2 : 3 C. 3 : 4 D. 8 : 9
4	The amount of coal used since 1945 up till now as compared to that used in the whole of history before that is	A. Much more B. Very small C. No amount at all D. None of these
5	First law of thermodynamic is special case of	A. Law of conservation of energy B. Charle's law C. Law of conservation of mass D. Boyle's law
6	The substances in which, atom are so oriented that their fields support each other and the atoms behave like tiny magnets, are called	A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
7	The charge carriers in electrolyte are positive and negative	A. protons B. electrons C. ions D. none of these
8	A body with frequency would complete one vibration in:	A. f seconds B. 1/f seconds C. 1 second D. f²second
9	Alfa particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
10	An vector of 10 N makes an angle of 45° with x-axis. Angle between its rectangular components with be:	A. 45<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° B. 90<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° C. 135<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip:

		initial;?" D. Zero
11	The velocity of sound is greatest in	A. Water B. Air C. Vacuum D. Metal
12	The rear wheels of an automobile are rotating with an angular velocity of 14 rev/sec which is reduced to 38 rad/sec in 5 second when brakes are applied. Its angular acceleration is:	A. 5 rad/sec² B. -10 rev/sec² C. -10 rad/sec² D. -5 rev/sec²
13	Flurescent screen is a screen where visible spot	A. vanishes B. is made C. becomes small and large D. none of these
14	With the propagation of a longitudinal wave through a material medium, the quantities transmitted in the propagation direction are	A. Energy, momentum and mass B. Energy C. Energy and mass D. Energy and linear momentum
15	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
16	Total number of base units are	A. Three B. Five C. Seven D. Nine
17	Which one of the following is not a vector quantity?	A. Kinetic energy B. Acceleration C. Momentum D. Force
18	A car is moves around a circular track of radius 0.3 m at the rate of 120 rev/min. The speed v of the car is:	A. 38 m/sec B. 3.8 m/sec C. 0.6 m/sec D. None of these
19	A mass difference of 0.0012 u is equivalent to and energy of:	A. 0.5 Me V B. 1.13 MeV C. 5.13 MeV D. 1.13 keV E. 1.13 eV
20	A truck of mass 5000 kg and a car of mass 1000 kg are both travelling at a speed of 36 km/hr. Assume the time reluired to stop the truck in 10 sec is X difference X and Y is equal to.	A. 4 mega Newton B. 14.4 Kilo Newton C. 4 Kilo Newton D. 14,4 Newton