Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	In case of an ideal gas, the P.E associated with its molecule is	A. maximum B. zero C. minimum D. not fixed
2	In an adiabatic expansion, the temperature of the gas	A. increases B. becomes zero C. decreases D. decreases rapidly
3	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">لا E. <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">لا/2 and 3<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">لا/2
4	Which one of the following physical quantities changes with relativistic speed	A. Length B. Mass C. Time D. All of the above
5	Work is product of:	A. Force and velocity B. Heat and energy C. Force and displacement D. None of these
6	The useful unit of angular replacement in SI unit is:	A. Degree B. Revolution C. Radian

		D. Metre
7	The peak value of alternating voltage is given by	
8	A body is executing free vibrations when it oscilates	A. with the interference of an external force B. without the interference of an external force C. with the interference of an internal force D. none of them
9	The restoring force is _____ amd opposite to the applied force within _____:	A. Equal, elastic limit B. Different, the walls of the laboratory C. Different, elastic limit D. None of these
10	The materials in which valence electrons are bound very tightly to their atoms and are not free, are known as	A. conductors B. insulators C. semi-conductors D. all of them
11	An example of photoconductor is:	A. Boron<o:p></o:p> B. Carbon<o:p></o:p> C. Iron<o:p></o:p> D. Aluminum<o:p></o:p> E. Selenium<o:p></o:p>
12	If the ratio of densities of two gases is 1:4, then the ratio of their rates of diffusion into one another is	A. 2 : 1 B. 4 : 1 C. 1 : 4 D. 3 : 4
13	A ball is dropped from a certain height and another ball is projected horizontally from the same point. Which of the following statement is correct?	A. Both hit the ground at the same velocty B. Both hit the ground at the same speed C. The change of velocity during the path for both balls is the same D. The change of speed during the path for both balls is the same
14	The space around the earth within which it expects a force of attraction on other bodies is known as:	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field
15	An alpha particle is accelerated through a potential difference of 10^6volt. Its kinetic energy will be	A. 1 MeV B. 2 MeV C. 4 MeV D. 8 MeV
16	If m is the mass of the gases ejected per second with velocity v relative to the rocket of mass M, then the acceleration of rocket is	A. a = M/mv B. a = mM/v C. a = mv/M D. a = v/mm
17	A sphere of mass m and velocity 2 V moving in the x direction collides with a sphere of mass 2m and velocity v moving in the direction. It the collision is perfectly elastic, which of the following statements in correct	A. The two spheres sticks together after impact B. The total kinetic energy before the impact in 3 mv3 C. The total momentum before impact is 4 mv D. Both B and C
18	When the emitter-base junction of a transistor is reverse biased, collector current	A. Reverses B. Increases C. Decreases D. Stops
19	Electron is a particle whose mass is:	A. Greater than that of a proton B. Smaller than of a proton and greater than mass of neutron C. Smaller than that of proton or neutron D. Greater than that of an atom

20	A body of weight 1 N has a kinetic energy of 1 joule when its speed is:	A. 1.46 m sec⁻¹ B. 2.44 m sec⁻¹ C. 3.42 m sec⁻¹ D. 4.43 m sec⁻¹