Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	For the working of a heat engine, there must be	A. a source of heat at high temperature B. a sink at low temperature C. both of them D. none of them
2	The value of the Stephen's constant for black body radiations is given by	A. 5.6 x 10⁸Wm⁻²K⁻⁴ B. 5.67 x 10⁻⁸Wm⁻²K⁻⁴ C. 2.9 x 10⁻³mK D. 2.9 x 10³mK
3	Work-energy principle states that work done on the body by applied force is equal to change in:	A. Potential energy B. Kinetic nergy C. Linear momentum D. None of these
4	A dirty carpet is to be cleaned by heating. This is in according with_____law of motion.	A. First B. Second C. Third D. None of these
5	Zirconia is classified as:	A. Ceramic solid B. Ionic compound C. Metal D. Either (A) or (B) E. Either (B) or (C)
6	The energy of a photon is represented by	A. h/c² B. h/T C. hc² D. hf/c²
7	If the length of a simple pendulum is 0.25 m its time period would be	A. 1.0 s B. 2.0 s C. 3.0 s D. 4.0 s
8	The work performed on an object does not depend on:	A. Force applied B. Angle at which force is inclined to the displacement C. Initial velocity of the object D. Displacement
9	Which of the following changes at an antinode in a stationary wave?	A. Density only B. Pressure only C. Both pressure and density D. Neither pressure nor density
10	In AND gate, the output is 1 if:	A. Both inputs are 0 B. Both inputs are 1 C. Only one input is 0 D. Both (A) and (B) E. Both (A) and (C)
11	Work is always done on a body when:	A. A force acts on it B. It moves through certain distance C. None of A and B is correct D. Both A and B is correct
12	Mass of proton is	A. 1.67 x 10⁻²⁷kg B. 1.67 x 10⁻³¹kg C. 1.66 x 10⁻³⁴kg D. 1.67 x 10⁻¹⁷kg
13	G.P. Thomson observer experimentally that electrons and neutrons possess	A. particle-like properties B. wave-like properties C. neither particle nor wave like properties D. none of these
14	The input resistance of the OP-AMP is the resistance between the	A. (-) input and output B. (+) input and output

		C. (-) and (+) inputs D. between any inputs
15	The property of light which does not change with the nature of the medium is:	A. Frequency B. Amplitude C. Wavelength D. None of these
16	The ratio of velocity of sound in air at 4 atm pressure and that at 1 atm pressure would be	A. 1 : 2 B. 4 : 1 C. 1 : 4 D. 2 : 1
17	There is present in paraffin a large amount of:	A. Nitrogen B. Hydrogen C. Carbon D. Baryllium E. Lithium
18	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
19	The amount of energy equivalent to 1 a.m.u is	A. 9.315 Mev B. 93.15 Mev C. 931.5 Mev D. 2.22 Mev
20	A metal plate of thickness half the separation between the capacitor plates of capacitance C is inserted. The new capacitance is	A. C B. C/2 C. Zero D. 2C