ECAT Pre General Science MCQ's Test For Physics Full Book

Sr	Questions	Answers Choice
1	A solar cell converts energy of the Sun into:	A. Heat energy B. Magnetic energy C. Light energy D. Sound energy
2	An object undergoes S.H.M has maximum speed when its displacement from the mean position is	A. maximum B. zero C. half of the maximum value D. one third of the maximum value
3	Huygen's principles states that:	A. Light has dual nature B. Either of these C. None of these D. Light travels in straigth line
4	Nucleus consists of	A. proton and neutron B. protons and electron C. electron and neutron D. protons only
5	The bands below the valence band are	A. completely filled and play active part in conduction process B. completely filled and plays no part in conduction process C. completely filled and play active part in conduction process D. not completely filled and play no part in conduction process
6	The product of force and time is called change in:	A. Momentum B. Impulse C. Force D. Both a and b
7	In a building, there are 15 bulbs of 40 watts, 5 bulbs of 100 watts, 5 fans of 80 watts and a heater of 1 kilowatt. The voltage of the electric main is 220 volts. The minimum efficiency of the main fuse of the building will be	A. 0.4 A B. 11.4 A C. 9.8 A D. 10.6 A
8	The ohm's is defined as	A. 1 ampere / 1 volts B. 1 coulomb / 1 volt C. 1 volt / 1 ampere D. 1 volt / 1 coulomb
9	A potential barrier of 0.7 V exists across p-n junction made from:	A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium
10	The percentage of available heat energy converted into work by a diesel engine is roughly	A. 35 %` B. 40 % C. 35 - 40 % D. 25 %
11	The energy acquired by a mass of 1g moving with the speed of light is	A. 3×10^8 J B. 9×10^{13} J C. 3×10^{13} J D. 9×10^{16} J
12	The waves moving from a sitar to a listener in air are	A. Longitudinal progressive B. Longitudinal stationary C. Transverse progressive D. Transverse stationary
13	The work done in moving a body between two points in a conservative field is independent of the	A. Direction B. Force applied C. Path followed by the body D. Power
14	Maximum work is done when force and displacement are	A. Parallel B. Antiparallel C. Perpendicular D. Both a and b

15	The half life of uranium-238 is	A. 6.2×10^9 years B. 4.5×10^9 days C. 4.5×10^9 years D. 1.3×10^6 years
16	The equation of continuity is	A. $A_1 A_2 = V_1 V_2$ B. $A_1 / V_1 = A_2 / V_2$ C. $V_1 / A_1 = V_2 / A_2$ D. $A_1 V_1 = A_2 V_2$
17	Michael Faraday and Joseph Henry belong respectively to	A. USA and England B. England and France C. England and USA D. USA and France E. None of these
18	A body moves a distance of 10 m along a straight line under the action of a force of 5 N and work done is 25J. the angle which the force makes with the direction of motion will be:	A. $60°$ B. $90°$ C. $30°$ D. $0°$
19	When a wall is pushed by a person very strongly, he has done:	A. Maximum work B. Zero work C. Positive work D. Negative work
20	In the resonance condition, the amplitude of the oscillator becomes	A. very large B. very small C. zero D. any one of them