

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

Sr	Questions	Answers Choice
1	A heat engine is that which converts	A. mechanical energy into thermal energy B. thermal energy into mechanical energy C. K.E into potential energy D. heat energy into light energy
2	In case of metallic conductors, the charge carriers are	A. Protons B. Electrons C. Antiprotons D. Positrons E. Both A and B
3	If the acceleration of a body is negative, then slope of the velocity-time graph will be:	A. Zero B. Positive C. Negative D. Infinity
4	Pressure exerted by a gas is	A. Independent of density of the gas B. Inversely proportional to the density of the gas C. Directly proportional to the square of the density of the gas D. Directly proportional to the density of the gas
5	The speed of randomly moving electrons depends upon	A. pressure B. volume C. temperature D. mass
6	A gas is compressed adiabatically till its temperature is double. The ratio of its final volume to initial volume will be	A. 1/2 B. More than 1/2 C. Less than 1/2 D. Between 1 and 2
7	The energy of a photon in a beam of infrared radiation of wavelength 1240 nm is	A. 100 eV B. 10^{-6} eV C. 10^{-3} eV D. 1.0 eV
8	The electric field, magnetic field and the direction of their propagation are mutually	A. perpendicular B. parallel C. none of these
9	In reverse-biased p-n junction, the reverse current is due to flow of:	A. Minority charge carriers B. Majority charge carriers C. Free electrons from p to n-region D. Holes from n to p-region E. all are true except (B)
10	The ratio of average e.m.f in the coil to the time rate of change of current in the same coil is called	A. Mutual induction B. Mutual inductance C. Capacitance D. Self inductance
11	Physics is one of the branches of:	A. Social sciences B. Physical sciences C. Biological sciences D. Abstract art
12	A point on the rim of a wheel moves 0.2 m when the wheel turns through an angle of 14.3 degrees. The radius of the wheel is	A. 0.05 m B. 0.08 cm C. 0.8 m D. 0.008 m
13	Computer chips are made from	A. Conductors B. Semiconductors C. Insulators D. Both A and B
14	A car is turning around a corner at 10 m/sec as it travels along an arc of circle. If value of centripetal acceleration is 10 m/sec^2 in this case, find radius of the circular path:	A. 1 m B. 5 m C. 10 m D. 15 m

		D. 15 m
15	The direction of the streamlines is the same as the direction of the	A. force B. torque C. velocity D. weight
16	A car battery has e.m.f 12 volt and internal resistance 5×10^{-2} ohm. If it draws 60 ampere current, the terminal voltage of the battery will be	A. 5 volt B. 3 volt C. 15 volt D. 9 volt
17	A coil of constant area is placed in a constant magnetic field. An induced current is produced in the coil when	A. The coil is distorted B. The coil is rotated C. The coil is neither distorted nor rotated D. Both A and B E. None of these
18	When radioactive nucleus emits α -particle, the proton-neutron ratio	A. decrease B. increase C. same D. none of these
19	Which of the following can become a good temporarily magnet	A. iron B. steel C. both of them D. none of them
20	Wave length of that color as compared to that of violet color is:	A. Smaller B. Longer C. Equal D. None of these