

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Examples of polymeric substances are:	A. Plastic B. Synthetic rubbers C. Zirconia D. All of these E. Both (A) and (B)
2	When sound waves travel from air to water which of these remains constant?	A. Velocity B. Frequency C. Wavelength D. All the above
3	Which of the following is a state variable	A. entropy B. pressure C. volume D. all of them
4	Within each domain, the magnetic field of all the spinning electrons are	A. parallel B. antiparallel C. perpendicular D. all of them
5	If one end of a rubber cord is fixed with a support and the other end is wiggled by hand, the waves generated on the cord are:	A. Stationary waves B. Transverse waves C. Both of these D. None of these
6	Rate of decay is actually described by.	A. Half line B. Decay constant C. Mean life D. Total life E. None of these
7	Binding energy per nucleus is	A. greater for heavy nucleus B. least for heavy nucleus C. greatest for light nuclei D. decreases for medium weight nuclei
8	In which process the condition for the application of Boyle's law on the gas is fulfilled	A. isochoric process B. adiabatic process C. isothermal process D. none of them
9	For the conversion of galvanometer into voltmeter, we connect a	A. small resistance in series with galvanometer B. small resistance in parallel with galvanometer C. high resistance in parallel with galvanometer D. high resistance series with galvanometer
10	Acceleration of a body at any particular instant during its motion is known as	A. average acceleration B. uniform acceleration C. instantaneous acceleration D. all of them
11	Coulomb's force between two point charges depends upon	A. Magnitude of charges B. Distance between them C. Medium in which they are located D. All of the above
12	Which of the following can become a good permanent magnet	A. iron B. steel C. both of them D. none of them
13	The graphical representation of ohm's law is	A. hyperbola B. straight line C. ellipse D. parabola
14	On the power stroke, a spark fires the mixtures causing a rapid increase in pressure and temperature and the burning mixture expands	A. adiabatically B. isothermally C. isochorically D. none of these

		D. isobarically
15	The total charge of any nucleus is given as	A. $Ze^{2/e}$ B. $Z^{2/e}$ C. Z/e D. Ze
16	Centripetal force for electron is given by	A. $mv^{2/r}$ B. $mv / r^{2/e}$ C. $mv^{2/r}$ D. $mr^{2/v}$
17	On the exhaust stroke, the outlet valve opens. The residual gases are expelled and piston moves	A. outwards B. inwards C. in either way D. none of these
18	The number of input terminals of an op-amp is:	A. One B. Two C. Three D. Four E. None of these
19	Electromagnetic radiation means:	A. Photons B. protons C. Electrons D. Mesons E. None of these
20	A wire is bent into a ring of radius R is given a charge q. The magnitude of the electrical field at the centre of the ring is	A. Two B. $1/2$ C. Zero D. $3/2$