

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Unit of impulse in	A. Newton B. Kg m C. Kg m/s D. Joule
2	For normal operation of transistor, the batteries	A. $V_{CC}$ is of much lower value than $V_{BB}$ B. $V_{CC}$ is of much higher value than $V_{BB}$ C. $V_{CC}$ is equal to $V_{BB}$ D. none of these
3	If we plot graph between potential difference (V) and current (I) obeying ohm's law, it will give us	A. parabola B. straight line C. hyperbola D. ellipse
4	The substances in which, atoms are so oriented that their fields support each other and the atoms behave like tiny magnets, are called	A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
5	Acceleration of a body is positive, if the velocity of the body is	A. constant B. increasing C. decreasing D. none of them
6	A body is moving with constant velocity of 10 m/sec in the north east direction. Then its acceleration will be:	A. 10 m/sec <sup>2</sup> B. 20 m/sec <sup>2</sup> C. 30 m/sec <sup>2</sup> D. Zero
7	A magnetic force on an electron travelling with $10^8 \text{ms}^{-1}$ parallel to a field of strength 1 Wb m <sup>-2</sup> is	A. Zero B. $10^{15} \text{N}$ C. $10^{-10} \text{N}$ D. $10^8 \text{N}$
8	Which instrument is expensive and difficult to use?	A. Voltmeter B. Potentiometer C. CRO D. Both A and C E. Both A and B
9	Self induced e.m.f. is also called	A. Motional e.m.f. B. Thermistor C. Electrostatic induction D. Back e.m.f.
10	Laplace formula is derived from	A. Isothermal change B. Adiabatic change C. Isobaric change D. None of these
11	Nowadays, Most of the electric energy is produced by the A.C. generators using:	A. Hydal water B. Geothermal energy C. Solar energy D. Biomass E. Both (B) and (D)
12	Some charge is being given to a conductor. Then its potential	A. Is maximum at surface B. Is maximum at centre C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre
13	When a bicycle is in motion but not pedaled, the force of friction exerted by the ground on the two wheels is such that it acts	A. In the backward direction on the front wheel and in the forward direction on the rear wheel B. In the forwards directions on the front wheel and in the backward direction on the rear wheel C. In the forward direction on both the wheels D. In the backward direction on both the wheels

		D. In the backward direction on both the wheels
14	Intensity of light determines the:	A. Energy of each photon B. Number of photons C. Speed of photons D. Size of photons E. None of these
15	The conduction band in a solid	A. may be empty B. cannot be empty C. should be filled D. all of them
16	Magnetic lines of force:	A. <b>Cannot intersect at all</b> B. Intersect at infinity C. Intersect within magnet D. Intersect at Neutral Point E. None of these
17	Substances that flow easily have	A. large coefficient of viscosity B. small coefficient of viscosity C. either of them D. none of them
18	A typical rocket consumes about	A. 100 kg of fuel B. 1000 kg of fuel C. 10000 kg of fuel D. 100000 kg of fuel
19	The number of input terminals of an op-amp is:	A. One B. Two C. Three D. Four E. None of these
20	When a silicon crystal is doped with a pentavalent element, such an extrinsic semi-conductor is called	A. p-type semi-conductor B. n-type semi-conductor C. either of them D. none of them