

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	If speed of electron is 5×10^5 m/s. How long does it take one electron to transverse 1 m?	A. 1×10^6 B. 2×10^6 C. 2×10^5 D. 1×10^5
2	Find the total displacement of a body in 8 seconds starting from rest with an acceleration of 20 cm/s^2	A. 0.064 m B. 640 cm C. 64 cm D. 64 m
3	A reversible cycle is the one in which	A. some of the changes are reversible B. all of the changes are reversible C. all of the changes are irreversible D. none of them
4	A boy pulls a toy car through a distance of 5 m by applying a force of 0.5 N, which makes an angle of 60° with the horizontal. The work done by the boy is:	A. 1.25 J B. 12.5 J C. 125 J D. None of these
5	The number of translation degrees of freedom for a diatomic gas is	A. 2 B. 3 C. 5 D. 6
6	Above the Curie temperature, iron becomes	A. ferromagnetic B. paramagnetic C. diamagnetic D. any one of them
7	A dirty carpet is to be cleaned by heating. This is in accordance with _____ law of motion:	A. First B. Second C. Third D. None of these
8	The nuclei of an element having the same charge number but different mass numbers are called:	A. Isobars B. Isotopes C. Isomers D. Isobaric E. Isothermal
9	A voltmeter is used to measure the	A. potential difference B. current C. temperature D. resistance
10	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
11	The value of threshold frequency for different metals is	A. different B. same C. may be different or may be same D. none of these
12	The ratio of the gravitational force F_g to the electrostatic force F_e between two electrons at the same distance apart is approximately	A. 9.8 B. 24×10^{19} C. 24×10^{42} D. 24×10^{-44}
13	The force of repulsion between two point charges is F , when these are at a distance 0.1 m apart. Now the point charges are replaced by spheres of radii 5 cm each having the same charge as that of the respective point charges. The distance between their centres is again kept 0.1 m; then the force of repulsion will	A. Increase B. Decrease C. Remain F D. Become $10F/9$
14	Significant figures in 0.2020 are:	A. Two B. Three C. Four D. Five
15	If the two charges in Coulomb's law have double distance between them, then electric force	A. Becomes two-fold B. Becomes four-fold C. Remains the same D. Becomes one-fourth

		D. None of these
16	Choose the set of physical quantities, which have both numerical and directional properties:	A. Velocity, mass B. Speed, acceleration C. acceleration weight D. Distance, force
17	Escape velocity from surface of Moon as compared to that from Earth surface is:	A. Greater B. Smaller C. Equal D. None of these
18	In a coil current change from 2 to 4 A in .05 s. If the average induced emf is 8V then coefficient of self-inductance is:	A. 0.2 henry B. 0.1 henry C. 0.8 henry D. 0.04 henry
19	In case of a parallel plate capacitor if the plate separation is doubled and plate area is halved, the capacitance becomes	A. Four-fold B. One-half C. One-fourth D. Zero
20	The conventional current is the name given to current due to flow of:	A. Positrons B. Positive charges C. Negative charges D. Both (A) and (C) E. None of these