ECAT Physics Chapter 14 Electromagnetism Online Test

Sr	Questions	Answers Choice
1	The voltage increases linearly with	A. time B. velocity C. acceleration D. torque
2	How many number of anodes used in electron gun	A. one B. two C. three D. six
3	Electron gun consist of	A. three anodes B. heating cathode C. three anodes D. three anodes , heating cathode, grid
4	A beam of electrons is provided by an	A. electron gun B. Suppray C. Injection D. None of these
5	Flurescent screen is a screen where visible spot	A. vanishes B. is made C. becomes small and large D. none of these
6	The CRO deflects the beam of electrons, when they passes through uniform	A. electric field B. gravitational field C. magnetic flax D. magnetic field
7	CRO deflects the beam of	A. proton B. a-particle C. electron D. neutron
8	(CRO) Cathode ray oscilloscope is a device used for high speed	A. velocity B. graph plotting C. time-velocity D. none of these
9	A magnetic force on an electron travelling with $10^8 ms^{-1}$ parallel to a field of strength 1 Wb m^{-2} is	A. Zero B. 10^5 m C. 10^{-10} N D. 10^8 N
10	The magnetic force exerted on an electron moving with velocity 'v' at right angle to the magnetic field is given by	A. F=eVB B. $F=e^2 V/B$ C. F=e/VB D. $F=B^2/ev$
11	A charged particle moving at right angle to the magnetic field will experience	A. minimum force B. maximum force C. zero D. moderate force
12	When charged particle is projected perpendicular to a uniform magnetic field its trajectory is	A. circular B. elliptical C. cycloid D. straight line
13	Charge to mass ratio (e/m) of an electron is given by the relation	A. $e/m = 2V/Br^2$ B. $e/m = 2V/B^2 r$ C. $e/m = 2V/B^2 r^2$ D. $e/m = V/2B^2 r^2$
14	The e/m of an electron moving in a circular path in a magnetic field is equal to	A. V/Br B. $V/B^2 r^2$ C. V^2/Br^2 D. V^2/Br
		A. mv^2/ r

15   Centripetal force for electron is given by

B. mv / r^2
C. mv^2 / r
D. mr^2 / v