

ECAT Physics Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	'K' is the proportionality constant of force experienced by conductor. What is the value of 'K' in SI units?	A. 0 B. 1 C. 0.5 D. -1
2	The SI unit of magnetic permeability is	A. $\text{Wb A}^{-1}\text{m}^{-1}$ B. Wb mA^{-1} C. Wb Am^{-1} D. None of these
3	The current in microamperes required to produce one millimeter deflection on a scale placed one meter away from the mirror of the galvanometer, defined the sensitivity of	A. ammeter B. voltmeter C. galvanometer D. avo-meter
4	The voltage increases linearly with	A. time B. velocity C. acceleration D. torque
5	A relationship between Gauss of magnetic induction and Tesla(T) is given by	A. $G = 10^{-3}T$ B. $G = 10^{-2}T$ C. $G = 10^{-4}T$ D. $G = 10^{-1}T$
6	Total number of turns on 0.15 m length solenoid is 300. the value of n is:	A. Greater than 300 B. Smaller than 300 C. Equal to 300 D. Any of (A) or (B) E. Any of (A) or (C)
7	The force exerted on a conductor of length L, carrying current I when placed in a magnetic field B is given by	A. $F = IB/L$ B. $F = L \times B/I$ C. $F = IL \times B$ D. $F = IL \cdot B$
8	The permeability of free space is measured in:	A. Wb/Am B. Wb A/m C. Am/Wb D. m/Web A E. None of these
9	The angle of deflection of coil can be measured by the	A. one method B. three method C. two method D. none of these
10	The working of all DC electric meters (galvanometers, ammeters and voltmeters) depends upon	A. Heating effect of current B. Chemical effect of current C. Magnetic effect of current D. Electromagnetic effect of current
11	A voltmeter is used to measure the	A. potential difference B. current C. temperature D. resistance
12	Resistance is measured in	A. volts B. ampere C. ohm D. watt
13	How many number of anodes used in electron gun	A. one B. two C. three D. six
14	The unit of magnetic flux is	A. Weber-m^2 B. Weber-m^3 C. Henry D. Weber
		A. $F = B^2$

15	If current through conductor is 1 A and length of conductor is 1m placed at right angle to the magnetic field, then the strength of magnetic field is	B. $F = 0$ C. $F = B$ D. $F = B/2$
16	The vector representation of force experience give the direction of	A. magnetic field B. current C. length of conductor D. force
17	Tesla is the unit of	A. Magnetic induction or flux density B. Magnetic flux C. Self inductance D. None of these
18	Charge to mass ratio (e/m) of an electron is given by the relation	A. $e/m = 2V/Br^2$ B. $e/m = 2V/B^2r$ C. $e/m = 2V/B^2r^2$ D. $e/m = V/2B^2r^2$
19	A beam of electrons is provided by an	A. electron gun B. Suppray C. Injection D. None of these
20	A galvanometer in which the coil comes to rest quickly after the current passed through it, or the current stopped form flowing through it, is called	A. dead beat galvanometer B. stable galvanometer C. shunt galvanometer D. sensitive galvanomter