

ECAT Pre General Science Physics Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	The total number of lines of magnetic induction passing through a surface perpendicular to the magnetic field is called	<p>A. magnetic flux</p> <p>B. magnetic flux density</p> <p>C. magnetic induction</p> <p>D. magnetic field intensity</p>
2	Which one of the following relations is correct?	<p>A. $1 \text{ Wb-m}^2 = \text{Nm}$</p> <p>B. $1 \text{ tesla} = 104 \text{ gauss}$</p> <p>C. $1 \text{ Wb-m}^2 = 1 \text{ tesla}$</p> <p>D. All of the above</p>
3	(CRO) Cathode ray oscilloscope is a device used for high speed	<p>A. velocity</p> <p>B. graph plotting</p> <p>C. time-velocity</p> <p>D. none of these</p>
4	The SI unit of magnetic induction is	<p>A. Gauss</p> <p>B. Tesla</p> <p>C. Weber</p> <p>D. Weber^2</p>
5	The force experienced by a single charge carrier moving with velocity 'v' in magnetic field of strength 'B' is given by	<p>A. $F = q(v/B)$</p> <p>B. $F = q(v \times B)$</p> <p>C. $F = q(v \times B)$</p> <p>D. $F = vx B$</p>
6	Galvanometer is a device used for the detection of	<p>A. voltage</p> <p>B. current</p> <p>C. temperature</p> <p>D. pressure</p>
7	If the value of galvanometer constant $k = C/BA$ is made small, the galvanometer can be made	<p>A. Sensitive</p> <p>B. Accurate</p> <p>C. Stable</p> <p>D. None of these</p>
8	Current is measured in	<p>A. volts</p> <p>B. watt</p> <p>C. ohm</p> <p>D. ampere</p>
9	When current passes through a solenoid coil, it behaves like a	<p>A. loop</p> <p>B. circle</p> <p>C. bar magnet</p> <p>D. none of these</p>
10	How many number of anodes used in electron gun	<p>A. one</p> <p>B. two</p> <p>C. three</p> <p>D. six</p>
11	Hold the solenoid in the right hand with fingers curling in the direction of current. The direction of the field will be given by:	<p>A. Thumb</p> <p>B. curled="" fingers<="" span="" style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", serif;'></p> <p>C. middle="" finger<="" span="" style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", serif;'></p> <p>D. arm="" hand<="" of="" right="" span="" style='font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", serif;'></p>

e. None of these

12	Centripetal force for electron is given by	A. $\frac{mv^2}{r}$ B. $\frac{mv}{r^2}$ C. $\frac{mv^2}{r}$ D. $\frac{mr^2}{v}$
13	Method "lamp and scale arrangement" used to measure the	A. angle of deflection B. restoring torque C. magnetic field strength D. current
14	The unit of flux density is also given by	A. $\frac{\text{Weber}}{\text{m}^2}$ or $\text{Wb} \cdot \text{m}^{-2}$ B. $\frac{\text{Weber}}{\text{m}}$ or $\text{Wb} \cdot \text{m}$ C. $\frac{\text{Weber}}{\text{m}}$ or $\text{Wb} \cdot \text{m}^{-1}$ D. Weber or Wb
15	The vector representation of force experience give the direction of	A. magnetic field B. current C. length of conductor D. force
16	The magnetic field inside a solenoid can be increased by:	A. Increasing n B. Decreasing I C. Increasing I D. By using iron core within solenoid E. All correct except (B)
17	When an electron enters in a magnetic field right angle to its motion, the magnitude of its velocity will be	A. changed B. zero C. unchanged D. none of these
18	Tesla is the unit of	A. Magnetic induction or flux density B. Magnetic flux C. Self inductance D. None of these
19	The SI unit of flux density is	A. $\frac{\text{Newton}}{\text{Amp-meter}}$ B. $\frac{\text{Newton-m}}{\text{Ampere}}$ C. $\frac{\text{Newton-m}}{\text{Amp}^2}$ D. $\frac{\text{Newton-Amp}}{\text{meter}}$
20	A resistance used in voltmeter is called	A. shunt resistance B. high resistance C. low resistance D. zero resistance