

Physics ECAT Pre Engineering Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	Resistance is measured in	<p>A. volts B. ampere C. ohm D. watt</p>
2	A field is uniform and much stronger:	<p>A. Inside a long solenoid</p> <p>B. Outside a long solenoid</p> <p>C. At the end of a long solenoid</p> <p>D. At the central point of long solenoid</p> <p>E. None of these</p>
3	In the region surrounding a current carrying wire:	<p>A. A magnetic field is setup</p> <p>B. The lines of force are elliptical</p> <p>C. Direction of lines of forces depends upon direction of current</p> <p>D. Both (A) and (C)</p> <p>E. All of these</p>
		<p>A. Is affected only by permanent magnets</p>

4	The pointer of a magnetic compass:	<p>A. Align itself parallel to the applied magnetic field</p> <p>B. Aligns itself perpendicular to the magnetic field</p> <p>C. Vibrates in the magnetic field of the current</p> <p>D. Aligns itself perpendicular to the magnetic field</p> <p>E. Both (C) and (D)</p>
5	A galvanometer is an instrument used to	<p>A. measure voltage across a circuit</p> <p>B. detect current in a circuit</p> <p>C. measure current flowing through a circuit</p> <p>D. none of these</p>
6	The current is measured in	<p>A. volts</p> <p>B. watt</p> <p>C. ampere</p> <p>D. ohm</p>
7	If the number of turns of a solenoid (carrying a steady current I) is doubled without changing the length of a solenoid, then magnetic field:	<p>A. Becomes Half</p> <p>B. Becomes double</p> <p>C. Is not affected</p> <p>D. Becomes one fourth</p> <p>E. None of these</p>
8	The galvanometer constant of a moving coil galvanometer is given by	<p>A. $K = BAN/C$</p> <p>B. $K = BN/CA$</p> <p>C. $K = NAC/B$</p> <p>D. $K = C/BAN$</p>
9	At a given instant, a photon moves in +x direction in a region where there magnetic field in -z direction. The magnetic force on the proton will be the:	<p>A. -y direction</p> <p>B. +y direction</p> <p>C. +z direction</p> <p>D. -z direction</p> <p>E. None of these</p>
10	In order to make a voltmeter, high resistance is connected with galvanometer, in	<p>A. perpendicular</p> <p>B. may be parallel or perpendicular</p> <p>C. series</p> <p>D. none of these</p>
11	The direction of lines of force depends upon the direction of	<p>A. voltage</p> <p>B. current</p> <p>C. charges</p> <p>D. none of these</p>
12	For measuring large currents, an ordinary galvanometer cannot be used without proper, then both relates with each other as	<p>A. modification</p> <p>B. voltage</p> <p>C. current</p> <p>D. resistance</p>
13	If current through conductor is 1 A and length of conductor is 1 m placed at right angle to the magnetic field, then the strength of magnetic field is	<p>A. $F = B^2$</p> <p>B. $F = 0$</p> <p>C. $F = B$</p> <p>D. $F = B/2$</p>
14	A resistance used in voltmeter is called	<p>A. shunt resistance</p> <p>B. high resistance</p> <p>C. low resistance</p> <p>D. zero resistance</p>
15	The vector representation of force experience give the direction of	<p>A. magnetic field</p> <p>B. current</p> <p>C. length of conductor</p> <p>D. force</p>
16	Lorentz force is defined as	<p>A. $q(\mathbf{E} + \mathbf{V} \times \mathbf{B})$</p> <p>B. $q(\mathbf{E} \times \mathbf{B} + \mathbf{V})$</p> <p>C. $q(\mathbf{E} \times \mathbf{V} + \mathbf{B})$</p> <p>D. $q(\mathbf{E} \times \mathbf{B})$</p>
17	Tesla is the unit of	<p>A. Magnetic induction or flux density</p> <p>B. Magnetic flux</p>

17. Tesla is the unit of

- C. Self inductance
- D. None of these

18. To convert galvanometer into ammeter we connect

- A. small resistance in parallel with galvanometer
- B. small resistance in series with galvanometer
- C. high resistance in series with galvanometer
- D. high resistance in parallel with galvanometer

19. When a suitable small resistance is put in parallel with the galvanometer coil, it is converted into

- A. Voltmeter
- B. Avometer
- C. Ammeter
- D. None of these

20. How many number of anodes used in electron gun

- A. one
- B. two
- C. three
- D. six