

ECAT Physics Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	The strength of magnetic field around the current conductor is	A. Smaller near the conductor B. Greater near the conductor C. Greater at the large distance from the conductor D. Constant near and away from the conductor
2	The total number of lines of magnetic induction passing through a surface perpendicular to the magnetic field is called	A. magnetic flux B. magnetic flux density C. magnetic induction D. magnetic field intensity
3	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:	A. $-y$ direction B. $+y$ direction C. $+z$ direction D. $-z$ direction E. None of these
4	The voltage increases linearly with	A. time B. velocity C. acceleration D. torque
5	In order to make a voltmeter, high resistance is connected with galvanometer, in	A. perpendicular B. may be parallel or perpendicular C. series D. none of these
6	Fluorescent screen is a screen where visible spot	A. vanishes B. is made C. becomes small and large D. none of these
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:	A. Becomes Half B. Becomes double C. Is not affected D. Becomes one fourth E. None of these
8	$F = I(L \times B)$ is a	A. vector B. scalar C. unit vector D. none of these
9	Magnetic flux passing through an element whose vector area makes an angle θ with lines of magnetic force is:	A. $BA \cos \theta$ B. Zero C. BA D. $BA \sin \theta$ E. None of these
10	In the expression of force experienced by electron, the direction of both v and B are	A. parallel B. zero C. perpendicular D. none of them
11	The straight current carrying conductor experiences maximum force in a uniform magnetic field when it is placed	A. parallel to the field B. Perpendicular to the field C. At an angle of 45 to the field D. None of the above
12	The sources of magnetic field are	A. isolated magnetic poles B. charges at rest C. charges in motion

D. none of these

13 Weber is a unit of

- A. magnetic flux
- B. magnetic field intensity
- C. magnetic induction
- D. magnetic flux density

14 the current is pass through the straight wire. The magnetic field established around it has its lines of force:

- A. <p class="MsoNormal" style="text-align:justify">Circular and endless<o:p></o:p></p>
- B. <p class="MsoNormal" style="text-align:justify">Oval in shape and endless<o:p></o:p></p>
- C. <p class="MsoNormal" style="text-align:justify">Straight<o:p></o:p></p>
- D. <p class="MsoNormal" style="text-align:justify">Parabolic<o:p></o:p></p>
- E. All are true

15 A beam of electrons is provided by an

- A. electron gun
- B. Suppray
- C. Injection
- D. None of these

16 In the region surrounding a current carrying wire:

- A. A magnetic field is setup<p class="MsoNormal" style="text-align:justify"><o:p></o:p></p>
- B. <p class="MsoNormal" style="text-align:justify">The lines of force are elliptical<o:p></o:p></p>
- C. <p class="MsoNormal" style="text-align:justify">Direction of lines of forces depends upon direction of current<o:p></o:p></p>
- D. <p class="MsoNormal" style="text-align:justify">Both (A) and (C)<o:p></o:p></p>
- E. All of these

17 A galvanometer is an instrument used to

- A. measure voltage across a circuit
- B. detect current in a circuit
- C. measure current flowing through a circuit
- D. none of these

18 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

19 Current is measured in

- A. volts
- B. watt
- C. ohm
- D. ampere

20 The current sensitivity of the galvanometer is

- A. C/BAN
- B. BAN/C
- C. CAN/B
- D. CBN/A