

## 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	In order to make a voltmeter, high resistance is connected with galvanometer, in	A. perpendicular B. may be paralld or pendicular C. series D. none of these
3	Lorentz force is defined as	A. $q(E + V \times B)$ B. $q(E \times B + V)$ C. $q(E \times V + B)$ D. $q(E \times B)$
4	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
5	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
6	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
7	Resistance is measured in	A. volts B. ampere C. ohm D. watt
8	The SI unit of magnetic flux is.	A. weber B. $Nm^{sup>-1</sup>A^{sup>-1</sup>}$ C. tesla D. gauss
9	The SI unit of magnetic flux is	A. $NmA^{sup>-2</sup>}$ B. $NmA^{sup>-1</sup>}$ C. $NAm^{sup>-1</sup>}$ D. $Nm^{sup>2</sup>A^{sup>-1</sup>}$
10	Magnetic lines of force:	A. <p style="font-size: 12pt; margin: 0;">&lt;span style="font-size: 12pt; line-height: 107%; font-family: "Times New Roman", serif;"&gt;Cannot intersect at all&lt;/span&gt;&lt;/p&gt; B. <p style="font-size: 12.0pt; margin: 0;">&lt;span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", serif;"&gt;Intersect at infinity&lt;/span&gt;&lt;/p&gt; C. <p style="font-size: 12.0pt; margin: 0;">&lt;span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", serif;"&gt;Intersect within magnet&lt;/span&gt;&lt;/p&gt; D. <p style="font-size: 12.0pt; margin: 0;">&lt;span style="font-size: 12.0pt; line-height: 107%; font-family: "Times New Roman", serif;"&gt;Intersect at Neutral Point&lt;/span&gt;&lt;/p&gt; E. <p style="font-size: 16px; margin: 0;">&lt;span style="font-family: "Times New Roman", serif;"&gt;None of these&lt;/span&gt;&lt;/p&gt;</p></p></p></p></p>
11	Gauss(G) is smaller unit of magnetic induction which is related to tesla(T) as	A. $1T = 10^{sup>4</sup>G}$ B. $1T = 10^{sup>5</sup>G}$

C.  $10^3 G$   
D.  $10^4 G$

- 12 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
- 13 For measuring large currents, an ordinary galvanometer cannot be used without proper, then both relates with each other as  
A. modification  
B. voltage  
C. current  
D. resistance
- 14 When the charged particle is projected at right angles to the field, then experienced by it will be:  
A. Maximum  
B. Zero  
C.  $qvB$   
D. Both (A) and (B)  
E. Both (A) and (C)
- 15 When charged particle is projected perpendicular to a uniform magnetic field its trajectory is  
A. circular  
B. elliptical  
C. cycloid  
D. straight line
- 16 A charged particle moving at right angle to the magnetic field will experience  
A. minimum force  
B. maximum force  
C. zero  
D. moderate force
- 17  $F = I(L \times B)$  is a  
A. vector  
B. scalar  
C. unit vector  
D. none of these
- 18 Method "lamp and scale arrangement" used to measure the  
A. angle of deflection  
B. restoring torque  
C. magnetic field strength  
D. current
- 19 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
- 20 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)