

Physics ECAT Pre Engineering Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	In a straight current carrying conductor, the direction of magnetic field can be found by	<p>A. right hand rule B. left hand rule C. head to tall rule D. none of these</p>
2	The magnetic field in the middle of a solenoid due to current is	<p>A. weak B. strong and uniform C. none-uniform D. zero</p>
3	The SI unit of magnetic permeability is	<p>A. $\text{WB A}^{-1}\text{m}^{-1}$ B. WB mA^{-1} C. WB Am^{-1} D. None of these</p>
4	The current is measured in	<p>A. volts B. watt C. ampere D. ohm</p>
5	The CRO is used for displaying the waveform of a given	<p>A. current B. voltage C. both of them D. none of them</p>
6	Flurescent screen is a screen where visible spot	<p>A. vanishes B. is made C. becomes small and large D. none of these</p>
7	How many number of anodes used in electron gun	<p>A. one B. two C. three D. six</p>
8	Gauss(G) is smaller unit of magnetic induction which is related to tesla(T) as	<p>A. $1\text{T} = 10^{-4}\text{G}$ B. $1\text{T} = 10^5\text{G}$ C. $1\text{T} = 10^3\text{G}$ D. $1\text{T} = 10^4\text{G}$</p>
9	The pointer of a magnetic compass:	<p>A. <p style="font-size: small; margin: 0;"><p class="MsoNormal" style="text-align:justify">Is affected only by permanent magnets</p></p> <p>B. <p style="font-size: small; margin: 0;"><p class="MsoNormal" style="text-align:justify">Align itself parallel to the applied magnetic field</p></p> <p>C. <p style="font-size: small; margin: 0;"><p class="MsoNormal" style="text-align:justify">Vibrates in the magnetic field of the current</p></p> <p>D. <p style="font-size: small; margin: 0;"><p class="MsoNormal" style="text-align:justify">Aligns itself perpendicular to the magnetic field</p></p> <p>E. Both (C) and (D)</p> </p></p></p></p>
10	$F = I(L \times B)$ is a	<p>A. vector B. scalar C. unit vector D. none of these</p>

11	When charged particle is projected perpendicular to a uniform magnetic field its trajectory is	<p>A. circular</p> <p>B. elliptical</p> <p>C. cycloid</p> <p>D. straight line</p>
12	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>
13	Weber is a unit of	<p>A. magnetic flux</p> <p>B. magnetic field intensity</p> <p>C. magnetic induction</p> <p>D. magnetic flux density</p>
14	The torque per unit twist of coil is called	<p>A. proportionality constant</p> <p>B. gravitational constant</p> <p>C. boltzman constant</p> <p>D. coupling constant</p>
15	A current carrying conductor is placed at right angle to the magnetic field. The magnetic force experienced by the conductor is	<p>A. minimum</p> <p>B. maximum</p> <p>C. zero</p> <p>D. none of these</p>
16	Strength of magnetic field is measured in SI units, in:	<p>A. N</p> <p>B. N/Am</p> <p>C. Am/N</p> <p>D. Nm/A</p> <p>E. None of these</p>
17	'K' is the proportionality constant of force experienced by conductor. What is the value of 'K' in SI units?	<p>A. 0</p> <p>B. 1</p> <p>C. 0.5</p> <p>D. -1</p>
18	The magnetic field inside a solenoid can be increased by:	<p>A. Increasing n</p> <p>B. Decreasing I</p> <p>C. Increasing I</p> <p>D. By using iron core within solenoid</p> <p>E. All correct except (B)</p>
19	NmA^{-1} is commonly called:	<p>A. Weber</p> <p>B. Ampere</p> <p>C. Gauss</p> <p>D. Coulomb</p> <p>E. None of these</p>
20	The angle of deflection of coil can be measured by the	<p>A. one method</p> <p>B. three method</p> <p>C. two method</p> <p>D. none of these</p>