

Physics ECAT Pre Engineering Chapter 14 Electromagnetism

Sr	Questions	Answers Choice
1	Strength of magnetic field is measured in SI units, in:	A. N B. N/Am C. Am/N D. Nm/A E. None of these
2	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
3	The sources of magnetic field are	A. isolated magnetic poles B. charges at rest C. charges in motion D. none of these
4	Hold the solenoid in the right hand with fingers curling in the direction of current. The direction of the field will be given by:	A. Thumb B. Curled fingers C. Middle finger D. Arm of right hand E. None of these
5	Resistance is measured in	A. volts B. ampere C. ohm D. watt
6	The force experienced by an electron projected in a magnetic field B with a velocity V is given by	A. $F = e(V \times B)$ B. $F = -e(V \times B)$ C. $F = e(B \times V)$ D. Both a and c
7	A resistance used in voltmeter is called	A. shunt resistance B. high resistance C. low resistance D. zero resistance
8	A current carrying conductor sets up its own:	A. Electric field B. Nuclear field C. Magnetic field D. None of these

neight: 107%; font-family: " Times New Roman", serif;">Both (A) and (C)<o:p></o:p></p>

E. All of these

9	Avo-meter is used of measure the	A. current, voltage B. voltage, resistance C. resistance, current D. current, voltage and resistance
10	If the value of galvanometer constant $k = C/BAN$ is made small, the galvanometer can be made	A. Sensitive B. Accurate C. Stable D. None of these
11	The working of all DC electric meters (galvanometers, ammeters and voltmeters) depends upon	A. Heating effect of current B. Chemical effect of current C. Magnetic effect of current D. Electromagnetic effect of current
12	Method "lamp and scale arrangement" used to measure the	A. angle of deflection B. restoring torque C. magnetic field strength D. current
13	The force acting as one meter length of the conductor placed at right angle to the magnetic field, when one A current is passing through it, defines the	A. magnetic flux B. magnetic induction C. magnetic field D. self inductance
14	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)
15	CRO deflects the beam of	A. proton B. a-particle C. electron D. neutron
16	Magnetic induction is also called as:	A. <p class="MsoNormal" style="text-align: justify;">Ampere's law<o:p></o:p></p> B. <p class="MsoNormal" style="text-align: justify;">Faraday's law<o:p></o:p></p> C. <p class="MsoNormal" style="text-align: justify;">Lenz's law<o:p></o:p></p> D. <p class="MsoNormal" style="text-align: justify;">Newton's law<o:p></o:p></p> E. <p class="MsoNormal" style="text-align: justify;">Coulomb's law<o:p></o:p></p></p></p></p></p></p>
17	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)
18	Weber is a unit of	A. magnetic flux B. magnetic field intensity C. magnetic induction D. magnetic flux density
19	The voltage increases linearly with	A. time B. velocity C. acceleration D. torque

A.

Maximum<o:p></o:p></p>
B.

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if the field is directed along the normal to the area, then flux is:

align:justify">Equal to zero</p></div>

C. <p class="MsoNormal" style="text-align: justify">Equal to BA</p></div>

D. <p class="MsoNormal" style="text-align: justify">Minimum</p></div>

E. <p class="MsoNormal" style="text-align: justify">Both (A) and (C)</p></div>