MDCAT Physics Chapter 11 Electromagnetism MCQ's Test

Sr	Questions	Answers Choice
1	The magnetic field of a solenoid is quite similar to that of a:	A. Straight conductor B. A horse shoe magne C. Any magnet D. A bar magnet
2	The magnetic field due to the electric current in a conducting wire is:	A. Towards the centre of the conducting wire B. Circular around the conducting wire C. In the direction of the electric current D. In the direction opposite to the electric current
3	A long solenoid has 20 turns/ cm. The current necessary to produce a magnetic field of 20 mellites inside the solenoid is approximately:	A. 1A B. 2A C. 4A D. 8A
4	A magnetic field	A. Always exerts a force on a charged particle B. Never exerts a force on a charged particle C. Exerts a force on a charged particle if it is moving across the magnetic lines of force D. Exerts a force on a charged particle if it is moving along the magnetic lines of force.
5	Magnetic field inside a solenoid is:	A.) Directly proportional to current B. Inversely proportional to current C. Directly proportional to its length D. Inversely proportional to total no of turns
6	The direction of force experienced by a moving in a magnetic field will be:	A. Parallel to the field B. Opposite to the field C. Parallel to its direction of motion D. Perpendicular to both the field and the velocity vector
7	The magnetic field produced due to the current in a straight wire is proportionalto the :	A. Electric current B. Conducting material C. Length of the wire D. Diameter of the wire
8	A positively charged particle is moving perpendicular to a uniform magnetic field. The magnetic force makes the particle to move along:	A. An elliptical path B. A circular path C. A parabolic path D. None of these
9	A source of a magnetic field is:	A. An isolated magnetic B. A static electric charge C. A moving electric charge D. None of these
10	Which one of the following particles projected perpendicular to a uniform magnetic field with the same velocity will be deflected least?	A. Electron B. Proton C. Deuton D. None of these
11	An electron and a proton are projected at right angles to a uniform magnetic field with	A. the electron trajectory will be less curved than proton's trajectory B. the electron trajectory will be more curved than proton's trajectory C.) both trajectories will be equally curved D.) both particles continue to move along a straight lins
12	A straight current carrying conductor experiences maximum forces in a uniform magnetic field when it is placed:	A. Parallel to the field B. Perpendicular o the field C. At an angle of 45 to the field D. None of these

13	A tritium and alpha particle enter the magnetic field with same kinetic energy, what will be the ratio of their radii?	A. 3:4 B. √3: 1 C. √3: 4 D. √3:√2
14	Charge to mass ratio (e/m) of a charge particle is also called its:	A. Specific charge B. Specific Force C. Gyro-magnetic ratio D. Magneto-mechanical ratio
15	If an electron vertically downwards, then the horizontal component of the earth's magnetic field will deflect it to wards	A. West B. East C. North D. North