BCM SCHOOL, BASANT AVENUE, DUGRI ROAD, LUDHIANA

ASSIGNMENT

XII – PHYSICS

CHAPTER – MAGNETIC EFFECTS OF CURRENT & MAGNETISM

DATE : AUG 7, 2023

Sl.No	MCQ (Question)
1	An alpha particle is moving perpendicularly to a uniform magnetic field of 3 Tesla with the velocity 10×10^5 m/s.What is the work done by the particle? a)30×10^6 J b) 60×10^6 J c) infinity d) zero
2.	Two anti-parallel conducting wires carrying currents in the ratio 2:3.What is the nature of the force acting between them? a) Attractive b) Repulsive c) Both attractive and Repulsive d) can not predict.
3.	A Galvanometer of resistance 10 Ω gives full-scale deflection when 1 mA current passes through it. The resistance required to convert it into a voltmeter reading upto 2.5 Volt is; a) 9800 Ω b) 2490 Ω c) 4980 Ω d) 9880 Ω.
4.	What is the shape of the magnet in Moving Coil Galvanometer to make the torque maximum? a) Horse Shoe b) Convex c) Concave d) None of these.
5.	A Galvanometer is said to be sensitive, when- a) Small deflection for a small current b) Small deflection for a large current c) large deflection for a small current d) large deflection for a large current .
6.	The current in the windings on a toroid is 2 Amp. There are 400 turns and the mean circumferential length is 40 cm. If the inside magnetic field is 1 Tesla, the relative permeability is near to- 400 b) 200 c) 300 d) 800.
7.	The magnetic flux linked with a coil is $\phi = 4t^2 + 6t + 9$ Wb. The emf induced in the coil in 2 sec is- a) 42 V b) 24 V c) 22 V d) 40 V.
8.	Two wires of same length are shaped into a square and a circle. If they carry same current, the ratio of their magnetic moment- a) 2: π b) π:2 c) 4:π d) π:4.
9.	The current sensitivity of a Galvanometer can be increased by decreasing- a) Magnetic field B b) No. of turns N c) Torsional constant k d) Area of the coil A.
10.	A wire in the form of a circular loop, of one turn carrying a current, produces magnetic induction B at the centre. If the same wire is looped into a coil of two turns and carries the same current, the new value of magnetic induction at the centre is- a) B b) 4B c) 2B d) 8B.