

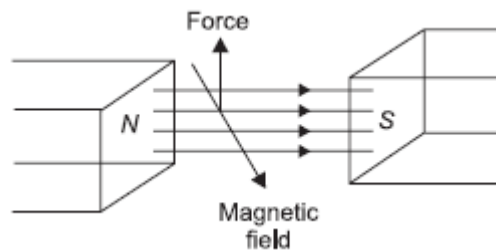
O P JINDAL SCHOOL, SAVITRINAGAR

CLASS TEST & PRACTICE

CLASS XII PHYSICS

TOPIC : MOVING CHARGES AND MAGNETISM

- 1 Which has greater resistance (a) milliammeter or ammeter (b) milliammeter or voltmeter? 1
- 2 A voltmeter, an ammeter and a resistance are connected in series with a battery. The voltmeter gives same deflection but the deflection of ammeter is almost zero. Explain why? 1
- 3 State the law used to determine the direction of magnetic field at the centre of current carrying circular coil. 1
- 4 A narrow beam of protons and deuterons, each having the same momentum, enters a region of uniform magnetic field directed perpendicular to their direction of momentum. What would be the ratio of the radii of the circular paths described by them? 1
- 5 Write two properties of a material used as a suspension wire in a moving coil galvanometer. 1
- 6 A charged particle enters into a uniform magnetic field and experiences an upward force as indicated in the figure. What is the charge sign on the particle? 1



- 7 How does the magnetic moment of an electron in a circular orbit of radius r and moving with a speed v change, when the frequency of revolution is doubled? 1
- 8 A current carrying loop is free to turn in a uniform magnetic field B . Under what conditions, will the torque acting on it be (i) minimum and (ii) maximum? 1
- 9 Write two factors by which voltage sensitivity of a galvanometer can be increased. 1
- 10 An ammeter and a milliammeter are converted from the same galvanometer. Out of the two, which current measuring instrument has higher resistance? 1