VIDYA BHAVAN, BALIKA VIDYAPEETH

SHAKTI UTTHAN ASHRAM, LAKHISARAI, PIN:-811311

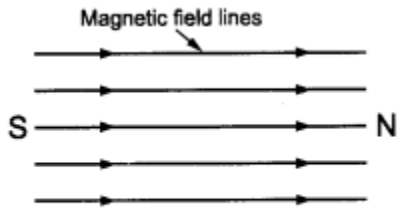
SUBJECT:- PHYSICS CLASS:- XTH REVISION:- 03/03/XXI

SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 2. (MAGNETISM) (BASED ON NCERT PATTERN)

(REVISION)

Question 1. The magnetic field in a given region is uniform. Draw a diagram to represent it.
Answer: A uniform magnetic field in a region is represented by drawing parallel straight lines, ail pointing in the same direction.
For example, the uniform magnetic field which exists inside a current-carrying solenoid can be represented by parallel straight lines pointing from its S-pole to N-pole (as shown in figure).



The uniform magnetic field inside a current-carrying solenoid

Question 2. In Activity 13.7 how do we think the displacement of rod AB will be affected if (i) current in rod AB is increased (ii) a stronger horse-shoe magnet is used; and (iii) length of the rod AB is increased ?
Answer:-
(i) When the current in the rod AB is increased, force exerted on the conductor increases, so the displacement of the rod increases.
(ii) When a stronger horse-shoe magnet is used, the magnitude of the magnetic field increases. This increases the force exerted on the rod and the displacement of the rod.
(iii) When the length of the rod AB is increased, force exerted on the conductor increases, so the displacement of the rod increases.