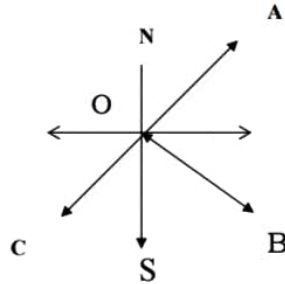


SETTING UP THE COMPASS – OBSERVATION OF BEARINGS

OBJECTIVE: To perform station adjustments and to observe magnetic bearings using a prismatic compass.

INSTRUMENTS: Prismatic compass, tripod and ranging rods.

SKETCH:



PROCEDURE:

The following station adjustments are to be done at each station where the compass is set up.

1. CENTERING:

- Centering is the process of keeping the prismatic compass over the station point.
- By moving the legs of the tripod suitably, centering will be done.
- Centering is checked by dropping a stone so that it falls on the top of the peg.

2. LEVELLING:

- Leveling is the process of making the compass exactly horizontal.
- Level the compass by means of ball and socket arrangements.
- When the compass is leveled, the aluminum ring swings freely.

3. FOCUSING:

To adjust the height of the prism so that the observations can be read clearly.

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4. OBSERVING BEARINGS:

- Set up the prismatic compass over station 'O' and perform station adjustments.
- Rotate the compass till the line of sight bisects the object at 'A'.
- Read the graduated ring through prism. The reading directly gives the magnetic bearing of 'OA' in whole circle bearing system.
- Follow the same procedure to observe the magnetic bearings 'OB' 'OC' also.

5. TABULAR FORM:

Sl.No.	Station	Sighted to	W.C.B.