Prism –Exercise

1. Define a prism.

2. Draw principal sections of an equilateral and a right angle prism.

3. Draw a neat diagram of a prism and show two refracting surfaces, base, refracting edge and refracting angle in it.

4. Draw a neat ray diagram to show incident ray, refracting ray and emergent ray of a prism.

5. Draw a neat ray diagram to show the following: i_1, i_2, r_1, r_2 and δ.

6. Draw $i - \delta$ curve for a prism and mark the position of minimum deviation in it.

7. What do you mean by the term 'angle of minimum deviation'?

8. State the factors on which angle of minimum deviation of a prism depend.

9. Explain why the incident ray bends towards the base of a prism.

10. Write a relation between the angle of incidence, angle of emergence, angle of prism and angle of deviation for a ray of light passing through an equilateral prism.

11. Name the colour of white light which is deviated the (i) the most (ii) the least.