Observe carefully the following diagrams which show the splitting up of a composite light into its constituent colours.

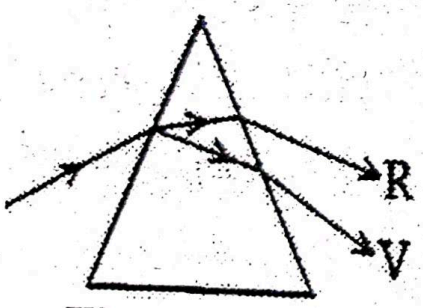


Fig. (i)

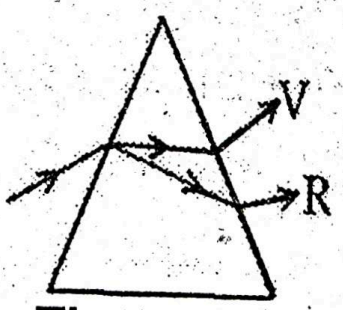


Fig. (ii)

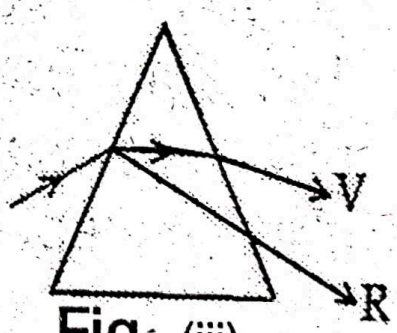


Fig. (iii)

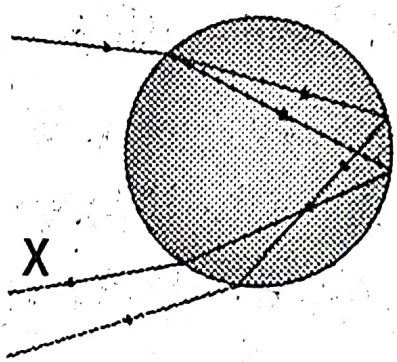
a) Which among the above figures is correct? Give reason. **2**

b) Write the name of the phenomenon.

a) Fig(i). When light is incident on a prism obliquely, violet having least wavelength deviates more and red having high wavelength deviates least.

b) Dispersion

A ray diagram of the dispersion of sunlight by a droplet of water is given below.



a) What is the colour represented by X? 1

b) How many times does a ray of light undergo refraction when it passes through a water droplet? 1

c) Give an instance in which a rainbow seen as a circle. 1

a. X – Violet b. Two times

c. When the person seen from an aeroplane, the rainbow appears as a circle.