**Aarambh Classes**

**Class X**

**PHYSICS WORKSHEET**

**Human Eye And the colourful world**

1. How will you use two identical glass prisms so that a narrow beam of white light incident on one prism emerges out of the second prism as white light ?Draw and label the ray diagram .
2. Why do the components colours of incident white light split into a spectrum while passing through a glass prism ?Explain .
3. What is myopia ?List two causes for the development of this defect ?How can this defect be corrected using alens ?Draw ray diagrams to show the image formation in case (Ii)defective eye (ii)corrected eye .
4. What is visible spectrum ?Why is red light used as the stopping light at traffic signals ?
5. What is atmospheric refraction ?Use this phenomenon to explain the following natural events .
6. Twinkling of stars
7. Advanced sunrise and delayed sunset .

Draw ray diagrams to illustrate your answer .

1. A person needs a lens of power – 4.75 D for correcting his distant vision .For correcting his near vision ,he needs alens of power +1.75 D .What is the focal length of the lens required for correcting (I)Distant vision (ii)near vision ?
2. Why does the sky appear dark instead of blue to an astronaut ?What happens to the image distance in the eye when we increase the distant of an object from the eye ?

8. Why is normal eye not able to see clearly the objects placed closer than 25 cm ?

9. The near point of ahypermetropic eye is 1 m. What is the power of the lens required to correct this defect ?Assume that the near point of a normal eye is 25 cm .

10. What happens to the image distance in the eye when we increase the distance of an object from the eye ?