

AIRPORT SCHOOL, AHMEDABAD
HOLIDAY HOMEWORK 2018 – 19
CLASS: XII
SUBJECT: PHYSICS

Answer the following questions:

1. Explain in detail Young's double slit experiment.
2. Explain compound microscope in detail along with required diagram.
3. Explain the refraction due to a convex surface when object is kept in the rarer medium and image formed is real.
4. Explain the concept of Diffraction due to single slit. Also derive expressions for maxima and minima.
5. Two thin lens of focal lengths +10 cm and -5 cm are kept in contact. What is their (a) focal length (b) power of accommodation?
6. Derive the Mirror formula for concave mirror.
7. Explain Prism in detail. Derive the equation for angle of deviation. Also derive relation between μ and angle of minimum deviation.
8. Explain astronomical telescope in detail.
9. What is refractive index? Write its formula too.
10. What is difference between apparent shift and lateral shift?
11. Derive Lens Formula for a convex lens
12. Explain polarization and any of its two causes.
13. Explain Brewster's law and Malus law in detail.
14. Derive the formula for apparent shift.
15. Explain the concept of Mirage in detail with proper diagram.