

KINETIC THEORY OF GASES

1. Any five postulates of kinetic theory of gases
2. Define mean free path
3. Derive expn for the pressure exerted by gases
4. Show that mean kinetic energy is proportional to absolute temperature

WAVES

1. What is meant by Doppler effect? Derive expn for the apparent frequency.
2. Differentiate transverse and longitudinal waves
3. Newton's formula and Laplace's correction.
4. Explain - all factors affecting velocity of sound
5. Effect of temperature on velocity of sound.
6. Derive expression - displacement for a progressive wave.
7. Any two characteristics of progressive waves.
8. What are nodes and antinodes
9. Beats? Define beat frequency.
10. Open and closed organ pipes - Ratio of frequencies
11. Any four characteristics of stationary waves.
12. What is meant by interference, progressive wave, stationary waves?