

# Acoustics

## Acoustics Topic Tree from Tamil Nadu State Textbook

### 1. Introduction

- Sound Waves

### 2. Sound Waves

- Longitudinal Waves
- Categories of Sound Waves based on Frequencies
- Sound and Light Waves Comparison
- Velocity of Sound Waves
- Factors Affecting the Velocity of Sound

### 3. Reflection of Sound

- Laws of Reflection
- Reflection in Denser Medium
- Reflection in Rarer Medium
- Reflection on Plane and Curved Surfaces

### 4. Echoes

- Conditions for Hearing Echoes
- Applications of Echoes
- Measuring Velocity of Sound using Echo Method

### 5. Applications of Reflection of Sound

- Sound Board
- Ear Trumpet
- Megaphone

### 6. Doppler Effect

- Definition
- Conditions for No Doppler Effect
- Applications of Doppler Effect