

1.13 HUMAN AUDITORY SYSTEM:

The human auditory system is complex and plays a crucial role in perceiving and interpreting sound. Key aspects include:

1. Auditory Perception:

- The ear captures sound waves, and the auditory system processes them to perceive pitch, volume, and directionality.

2. Spatial Hearing:

- The brain processes auditory cues to determine the direction and location of sound sources, contributing to spatial awareness.

3. Frequency and Pitch:

- Different frequencies of sound waves are perceived as pitch. The range of audible frequencies for humans is typically from 20 Hz to 20,000 Hz.

4. Volume and Intensity:

- The amplitude of sound waves determines volume or intensity. Loudness is measured in decibels (dB).

5. Timbre:

- Timbre refers to the quality or character of a sound. It allows us to distinguish between different musical instruments or voices.

6. Auditory Memory:

- The auditory system retains and recalls sound information, contributing to memory and recognition of familiar sounds.