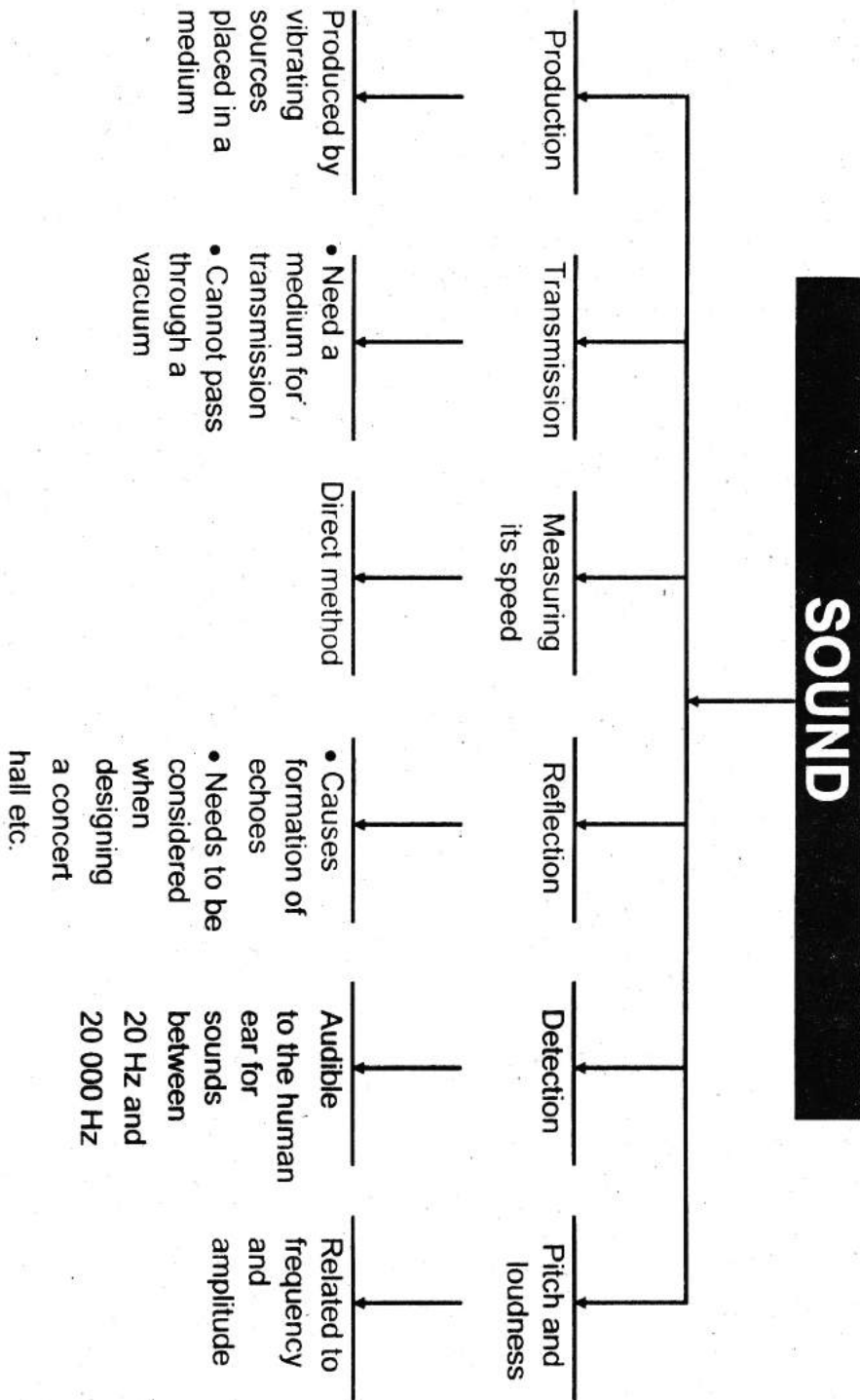


### CONCEPT MAP



## TOPICAL MULTIPLE CHOICE QUESTIONS

### 11.1 Sound Waves:

- The study of sound is called**  
(a) Acoustic (b) Optics (c) Electrostatics (d) All of these
- Sound is produced by \_\_\_\_\_.**  
(a) Propagation (b) Vibration (c) Both of these (d) None of these
- Sound can travel only in presence of**  
(a) Medium (b) vacuum (c) Air (d) Both a and c
- Sound is \_\_\_\_\_ Wave**  
(a) Electromagnetic (b) Transverse (c) Longitudinal (d) None of these

### 11.2 Characteristics of Sound:

- Characteristic by which We can distinguish between two sounds of same loudness and pitch is called \_\_\_\_\_.**  
(a) Loudness (b) Pitch (c) Quality (d) intensity of sound
- Pitch of sound depends on**  
(a) Amplitude (b) Frequency (c) Time period (d) Displacement
- Distance between two consecutive compressions and rarefactions is the \_\_\_\_\_ of sound wave.**  
(a) Amplitude (b) Frequency (c) Wave Length (d) none of these
- Loudness of sound depends on**  
(a) Amplitude of vibrating body (b) Area of vibrating body  
(c) Distance of vibrating body (d) All of these
- \_\_\_\_\_ is the characteristic of sound by which we can distinguish between a shrill and a grave sound.**  
(a) Pitch (b) loudness (c) Intensity (d) Quality
- Frequency of silent whistle Lies between \_\_\_\_\_.**  
(a) 20,000Hz - 25,000Hz (b) 20,000Hz - 35,000Hz  
(c) 20Hz - 20,000Hz (d) 15,000Hz - 40,000Hz
- The intensity of sound depends on the \_\_\_\_\_ of sound.**  
(a) Time period (b) frequency (c) Amplitude (d) None of these
- Intensity is a \_\_\_\_\_ quantity.**  
(a) Vector (b) Scalar (c) Physical quantity (d) None of these
- Intensity of faintest sound is**  
(a)  $10^{12} \text{ Wm}^{-2}$  (b)  $10^{-12} \text{ Wm}^{-2}$  (c)  $10^{-8} \text{ Wm}^{-2}$  (d)  $10^{-9} \text{ Wm}^{-2}$

14. Intensity of loudest audible sound is \_\_\_\_\_.
- (a)  $10^{-12} \text{Wm}^{-2}$  (b)  $1 \text{Wm}^{-2}$  (c)  $20 \text{Wm}^{-2}$  (d) All of these
15. Intensity of whispering
- (a)  $10^{-5} \text{Wm}^{-2}$  (b)  $10^{-8} \text{Wm}^{-2}$  (c)  $10^{-9} \text{Wm}^{-2}$  (d)  $10^{-12} \text{Wm}^{-2}$
16. The loudness of sound is directly proportional to logarithm of intensity, this Law is called \_\_\_\_\_.
- (a) Weber Fechner Law (b) Law of Gravitation  
(c) Intensity Level (d) Echo
17. Voice of Child is \_\_\_\_\_.
- (a) Grave (b) Shrill (c) Faint (d) Loud
18. I bell is equal to
- (a) 20dB (b) 10dB (c) 100dB (d) 50dB
19. The amplitude of 100 dB sound is \_\_\_\_\_.
- (a) 1000 (b) 10,000 (c) 100,000 (d) 1001000
20. By using an \_\_\_\_\_ we can see sound wave.
- (a) Electroscope (b) Stroboscope (c) Gastroscope (d) Oscilloscope

### 11.3 Reflection (ECHO) of Sound:

21. Echo of sound is
- (a) Refraction (b) Reflection (c) Diffraction (d) Interference.
22. The sensation of sound persists in our brain about \_\_\_\_\_.
- (a) 1s (b) 0.1s (c) 0.01s (d) 2s
23. For hearing distinct echoes, the minimum distance of obstacle from source of source of sound must be
- (a) 34m (b) 17m (c) 38m (d) 16m

### 11.4 Speed of Sound:

24. The speed of sound in solid is about \_\_\_\_\_ times that in gases.
- (a) 5 (b) 15 (c) 20 (d) 10
25. The speed of sound in air at a2 atm pressure and at room temperature ( $21^\circ\text{C}$ ) is
- (a)  $320 \text{ms}^{-1}$  (b)  $360 \text{m/s}$  (c)  $343 \text{ms}^{-1}$  (d) None of these
26. The speed of sound varies with \_\_\_\_\_.
- (a) Temperature (b) Humidity (c) both a and b (d) None of these
27. The speed of sound in solid is \_\_\_\_\_ than liquid and air
- (a) Greater (b) Smaller (c) Equal (d) None of these
28. Bats can hear Frequencies up to 120,000Hz
- (a) 10,000Hz (b) 120,000Hz (c) 12,00,000Hz (d) 120,00,000Hz

















