MULTIPLE CHOICE QUESTIONS (MCQs):

(1) **A decibel is a:**
* Musical instrument * Musical note & wave length * Measure of intensity level

(2) **Beat are the result of:**
* Diffraction * Constructive interference only
* Destructive interference only * Constructive and destruction interference both

(3) **Speed of sound waves does not depend upon:**
* Wind speed * Temperature * Pressure * Density

(4) **A 252Hz timing fork produces four beats per second when sounded with another tuning fork of unknown frequency:**
* 63Hz * 256Hz * 1008Hz * 252Hz

(5) **We recognize the voice of friend over the telephone by virtue of:**
* Quality * Intensity * Loudness * Pitch

(6) **When the temperature of air rises, the speed of sound wave increases because:**
* Only frequency increases * Only wave length increases
* Both frequency and wave length increases * Only wave length decreases

(7) **The relative intensity I/I_0 of the sound of a jet engine is 10^{13}. The intensity level in dB will be:**
* 30 * 130 * 1300 * 1.3

(8) **Which of the following frequency of the sound wave is audible:**
* 5Hz * 5000Hz * 2500KHz * 50KHz

(9) **As a source of sound moves away from a stationer listener, there is an apparent frequency:**
* Decreases in wave length * Increase in pitch * Decrease in phase * Decrease in pitch

(10) **The Physical quantity which is related to loudness of sound is:**
* Frequency * Intensity * Quality * Wave length

(11) **When two vibrating bodies have slightly different frequency, they produce:**
* Echo * Beats * Resonance * Polarization

(12) **Which one of the following properties of sound is effected by the change in temperature:**
* Amplitude * Wave length * Frequency * Intensity

(13) **The unit of intensity level of sound is:** * Watt * Joule * Decibel * Diopter

(14) **The intensity level of sound of intensity 10^{-12} watt/m^2 is a bell is:**
* Zero * One * Two * Three

(15) **The pitch of sound depends upon:**
* Velocity * Intensity * Frequency * Amplitude

(16) **Which of the following is compressional waves:**
* Light wave * Sound wave * x – rays * y – rays

(17) **Sone is the unit of:**
* Intensity level * Intensity of sound * Pitch of sound * Loudness of sound

(18) **The maximum number of beats / second that a human can dect is:**
* 5 * 7 * 3 * 4

(19) **One sone at 1000 Hz is equal to:** * 60d B * 40d B * 30d B * 100d B

(20) **The earthquake waves are the example of:**
* Audible waves * Infrasonic waves * Shock waves * Ultra sonic waves

(21) **When the temperature is increased by 10°C the speed of sound is:**
* Increased by 610 cm /s * Decreased by 610 m/s
* Increased by 283 cm/s * Decreased by 283 cm/s

(22) **The wave length of sound is increased when:**
* The source moves toward the listener * The listener moves toward the sources
* The source moves away from the listener * The listener moves away from the source

(23) **According to Weber Fechner law:**
* $L \propto \text{Log } L/I_o$ * $L \propto \text{Log } I$ * $L \propto I$ * $L = I_o$

(24) **In aerodynamics the mach number is equal to:**
* V Vs * $\frac{V}{V_s}$ * V^2 / Vs * $\frac{V_s}{V}$

(25) **The velocity of sound in vacuum at 0°C:**
* 332m/sec * 344m/s * 330m/s * 0

(26) **Power Law determines:** * Power * Work * Intensity * Loudness of sound

ANSWER KEY

1. Measure of intensity level	**2.** Constructive and destructive interference both.
3. Wind speed	**4.** 256Hz
5. Quality	**6.** Only wave length increases
7. 30	**8.** 5000Hz
9. Decrease in pitch	**10.** Intensity
11. Beats	**12.** Wave length
13. Decibel	**14.** Zero
15. Frequency	**16.** Sound wave
17. Loudness of sound	**18.** 7
19. 40 dB	**20.** Infrasonic waves
21. Increased by 610 cm /s	**22.** The source moves away from the listener
23. $L \propto \text{Log } I$	**24.** $\frac{V}{Vs}$
25. 0	**26.** Loudness of sound