**Gulistan Academy**

Physics (10th) Max.Marks = 40

Chapter No.11 (Sound) Pass Marks = 20

**Time = 1 Hour** Teacher Name: M.Maaz

**Question No.1: Give short answers. (2x12 = 24)**

1. *What are the necessary conditions for the production of sound?*
2. *Sound is a form of wave. List at least three reasons to support the idea.*
3. *On what factors does the loudness of sound depend?*
4. *What is the difference between frequency and pitch?*
5. *What is the audible frequency range for human ear? Does this range vary with age?*
6. *We can recognize persons speaking with the same loudness from their voice. How is this possible?*
7. *Will two separate* ***50 dB*** *sounds together constitute a* ***100 dB*** *sound? Explain.*
8. *A sound wave has a frequency of* ***2 kHz*** *and wavelength* ***35 cm****. How long will it take to travel* ***1.5 km****?*
9. *Define Loudness and Quality of sound.*
10. *Calculate the intensity level of the faintest audible sound.*
11. *What is noise pollution? Shortly explain.*
12. *You can listen to your friend round a corner, but you cannot watch him/her. Why?*

**Question No.2: (5+3 = 8)**

1. *Prove the Longitudinal nature of Sound.*
2. *If at Anarkali bazar Lahore, the sound level is* ***80 dB****, what will be the intensity level of sound there?*

**Question No.3: (5+3 = 8)**

1. *Write any* ***Five*** *uses of Ultrasound.*
2. *A ship sends out ultrasound that returns from the seabed and is detected after* ***3.42 s****. If the speed of ultrasound through seawater is* ***1531 ms-1****, what is the distance of the seabed from the ship?*

***Best of luck***