

**ABSTRACT NO.:** 533

**TITLE:** **Audiometry of a Group of University Students**

**AUTHORS:** **Vimal Sonny**  
**Emile Grant**

**SUPERVISOR:** **Professor Ramsey Saunders**

The objective of this research project was to compare the hearing capability of "normal" individuals to those exposed to high levels of noise on a regular basis. (Normal here refers to those persons who are not exposed to high levels of noise on a regular basis.) This objective was achieved by using an audiometer and headphones to perform tests on the hearing mechanism of each individual. The resulting audiograms produced on the audiometer were then observed and analysed. The tests performed were the Air conduction test and the Bone conduction test. For the Air conduction test, tones at various frequencies and decibel levels were sent to each ear independently via headphones. This was done to determine the threshold of hearing for each ear at different frequencies. For the bone conduction test, tones at various frequencies and decibel levels were sent to the mastoid bone via headphones. This was done to test the conduction of the mastoid bone. For each test, individuals responded to sounds via an indicator. The majority of patients that were tested showed hearing ability within normal limits for air and bone conduction, that is thresholds above 25 dB for the frequency range of 125 Hz – 16 kHz. A few patients however showed hearing loss from the air and/or bone conduction tests, displaying thresholds greater than 25 dB with some even having thresholds a lot higher than 25 dB, with one reaching as high as 70 dB at a frequency of 6 kHz.