申論題 (共 5 題，每題 20 分，共 100 分)

1. Please describe the process by which air-conducted sound is transferred through the outer ear to the ear drum.

2. The sensitivity of the auditory system varies as a function of frequency. Please describe how the intensity of sound pressure waves is related to decibels of hearing loss.

3. Discuss how the outer hair cells work to increase hearing sensitivity and to provide gain control of the peripheral auditory system.

4. Please describe the functional roles of the cochlear nucleus and superior olivary complex to process the auditory information.

5. Please describe the following terms of the psychoacoustics:

   1) threshold of audibility
   2) masking
   3) binaural hearing
   4) loudness and pitch