## 國立臺北護理健康大學 104 學年度碩士班招生

## 語言治療與聽力學系 碩士班

## 聽力科學 試題

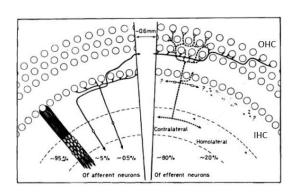
注意 1. 本試題共有 2 頁

2. 請用中文或英文作答。

3. 請於答案卷上標明題號,並依序作答。

## 問答題 (每題 20 分) (中文或英文答題皆可)

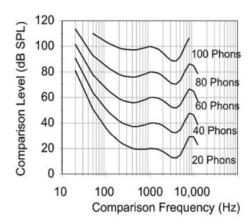
- 1. We hear sounds through two basic physiologic pathways. Please (1) describe the two pathways of sound, and (2) illustrate the clinical application of comparing the two pathways of sounds during a hearing test. (20%)
- 2. The following figure shows the arrangement of nerve fibers to the inner and outer hair cells. Please describe the cochlea's sensory innervation based on the following figure. (20%)



3. The following table shows the four possible outcomes for any given test trial in the theory of signal detection. Please describe (1) the four possible outcomes from (a) to (d), and (2) the rationale of approaching hearing from the standpoint of the theory of signal detection. (20%)

		RESPONSE	
		Yes	No
STIMULUS	Present	(a)	(b)
	Absent	(c)	(d)

**4.** The following figure displays the equal-loudness contours. Please (1) explain the figure and (2) illustrate how to obtain the equal-loudness contours. (20%)



**5.** The following figure shows the value of threshold required to just discriminate a difference in frequency from a given frequency. Please explain the figure. (20%)

