S1185 – Introduction to Hearing Aid Audiology

Please answer all 5 questions

1. (a) Label the attached diagram of the outer, middle and inner ear, clearly indicating the locations of the following structures:

   - The pinna
   - The ear canal
   - The tympanic membrane
   - The ossicles – malleus, incus and stapes
   - The cochlea
   - The auditory nerve
   - The eustachian tube
   - The round window

   (10 marks)

   (b) Does the base of the cochlea deal with high or low frequency sounds? (2 marks)

   (c) What is the function of the eustachian tube? (3 marks)

   (d) Name the 3 fluid-filled chambers that extend the length of the cochlea? (3 marks)

   (e) Which of these chambers is filled with endolymph? (2 marks)

   Total = 20 marks

2. Briefly explain what is meant by the following terms:

   (a) Client-centred practice (10 marks)

   (b) Reflective practice (10 marks)

   Total = 20 marks

3. (a) When describing a pure tone, what is meant by each of the following terms:
   - Amplitude
   - Wavelength
   - Frequency
   - Period (4 marks)

   (b) We measure sound in decibels (dB) but why do we measure hearing thresholds in dBHL rather than dBSPL? (6 marks)

(c) A doubling of sound pressure results in an increase of how many decibels?

(2 marks)

(d) Why does the human ear canal amplify sounds more at particular frequencies?

(8 marks)

Total = 20 marks

4. (a) What are the main differences between an RCCP registered Audiologist and an HCPC registered Hearing Aid Dispenser in terms of their scopes of practice?

(10 marks)

(b) Briefly discuss the legal and ethical issues that might arise if a member of one of these professions steps outside his/her scope of practice.

(10 marks)

Total = 20 marks

5. Explain what is meant by the following terms and briefly discuss the importance of each in healthcare provision:

(a) Evidence-based practice. (10 marks)

(b) Clinical audit. (10 marks)

Total = 20 marks

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Diagram required for question 1 (a)

Please label the required structures and place this page in your answer booklet

Please write your student number here_____