



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

**SCHOOL OF EDUCATION, HUMANITIES AND SOCIAL SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION**  
**(SNE) WITH IT**  
**4<sup>TH</sup> YEAR 2<sup>ND</sup> SEMESTER 2017/2018 ACADEMIC YEAR**  
**MAIN CAMPUS SPECIAL RESITS/EXAMINATION**

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**COURSE CODE: ESE 411**

**COURSE TITLE: Introduction to Audiology**

**EXAM VENUE:**

**STREAM: (BED SNE)**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer Question ONE (COMPULSORY) and ANY other 2 questions**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

### Question One

- a) Define the following terms:
  - i) Audiologist
  - ii) Decibel
  - iii) Reverberation of sound (6 marks)
- b) State any two causes of hearing impairment in the external auditory canal (2 marks)
- c) Draw a diagram to show
  - i) A “soft high frequency sound”
  - ii) A “loud low frequency sound”
  - iii) A “soft mid-pitched sound” (6 marks)
- d) A student of audiology explained that pitch and intensity of sound mean “the same thing”  
Accept or disagree with the statement. (2 marks)
- e) If 0 is the source of sound, which property of sound does the diagram indicate (2 marks)
- f) List any four branches of audiology (2 marks)
- g) State any two types of hearing loss that an audiologist comes up with according to the site of lesion. (4 marks)
- h) (i) Differentiate between “sound spill-over and masking” during assessment of hearing. (4 marks)  
ii) Explain how an audiologist guards against the effect of environmental sound during assessment of hearing. (2 marks)

### Question Two

- a) Briefly explain how mixed hearing impairment result in audiological point of view. (9 marks)
- b) An audiologist decided to perform screening test of hearing in his audiology room.
  - i) Cite and explain the three types of screening test he was likely to conduct-specify age appropriateness for each of them. (9 marks)
  - ii) State any two tools he could have ready for this assessment (2 marks)

### Question Three

- a) Differentiate between auditory training and speech training which are both the concerns of an educational audiologist (6 marks)
- b) Cite :
  - i) Any two tools required for auditory training clearly specifying their functions (6 marks)
  - ii) Any two resources necessary for speech training and how they are used in the process

(6 marks)

- c) Why is speech training an important event in a school for learners with hearing impairment? (2 marks)

#### Question Four

- a) Explain how the process of hearing takes place in the middle ear and the inner ear cavities to finally reach the brain for interpretation (10 marks)
- b) Differentiate between “air conduction and bone conduction” in audiometric testing of hearing (6 marks)
- c) State the levels of hearing impairment that an audiologist designates to a client after audiometric assessment. (4 marks)

#### Question Five

As an educational audiologist in the county, you have been invited to conduct a seminar to present on how children with hearing impairment can be assisted to undergo education program to reach university for degree course. Prepare a concentrated speech to make them change their attitudes so that more children with hearing impairment can reach university education-young children still at home. (20 marks)