



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY  
SCHOOL OF EDUCATION  
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF  
EDUCATION SPECIAL NEEDS EDUCATION  
4<sup>TH</sup> YEAR 2<sup>ND</sup> SEMESTER DECEMBER 2016  
ACADEMIC YEAR 2016/2017**

**MAIN CAMPUS- REGULAR**

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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 1 (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.**

### Qn1

- a) Differentiate between:
  - i. Frequency and intensity of sound
  - ii. Perception and loss of sound
  - iii. Hearing aid and audiogram (6 marks)
- b) Explain what is meant by reverberation of sound (4 marks)
- c) Describe what result to hearing impairment in the inner ear. (8 marks)
- d) Explain how decibels and frequencies are applicable in assessment of hearing loss (6 marks)
- e) Explain the following components of hearing aid:
  - i. Microphone
  - ii. amplifier (6 marks)

### Qn 2

You have decided to perform screening test of hearing in a room

- a) With specific examples, explain how distraction and performance tests of hearing loss are conducted (8 marks)
- b) Briefly describe the acoustic treatment of such a room (4 marks)
- c)
  - i. Describe the use of audiometer in an Audiological assessment of hearing (4 marks)
  - ii. State the levels of hearing loss that result after audiometric test of hearing. (4 marks)

### Qn 3

- a) Using diagrams explain the difference between:
  - i. High frequency, mid frequency and low frequency sounds. (12 marks)
  - ii. Loud and soft sounds (8 marks)

### Question 4

Giving details, describe how the process of hearing takes place (20 marks)

### Qn 5

- a) What is residual hearing and its application in a classroom situation? (4 marks)
- b) State any three examples of a hearing aid (3 marks)
- c) As a teacher in a class of learners with hearing impairment, state:
  - i. What you do before providing a child with hearing aid. (3 marks)
  - ii. State how this hearing aid should be managed for effective use in the class. (6 marks)
- d) Using the audiogram form provided, draw an audiogram indicating that the right ear has moderate hearing loss. (4 marks)