



# MACHAKOS UNIVERSITY

University Examinations 2022/2023 academic year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND SNE

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF EDUCATION (SPECIAL NEEDS EDUCATION)

ESN 455: AUDIOLOGY AND ELECTROACOUSTICS

**DATE:**

**TIME:**

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## INSTRUCTIONS

**Answer question ONE and any other TWO questions.**

### **QUESTION ONE (COMPULSORY) (30 MARKS)**

- a) Discuss six branches of auditory (6 marks)
- b) Explain using relevant examples speech perception to a learner with hearing Impairment. (4 marks)
- c) Discuss the significance of a hearing screening program within the school. (2 marks)
- d) Identify five sources of sound that can destruct learning in your school. (5 marks)
- e) Explain why the sense of hearing is critical to children. (2 marks)
- f) Discuss the role of audiology in human growth and development. (4 marks)
- g) Discuss the auditory system using specific examples. (5 marks)
- h) Explain the rationale of speech audiometric test. (2 marks)
- i) Describe the hearing test procedures for a learner with hearing impairment. (2 marks)

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***Examination Irregularity is punishable by expulsion***

**QUESTION TWO (20 MARKS)**

Explain how hearing loss affects speech intelligibility (20 marks)

**QUESTION THREE (20MARKS)**

Discuss considerations that should be made in choosing an individual hearing aid for a learner with hearing impairment. (20 marks)

**QUESTION FOUR (20MARKS)**

Discuss eight types of individual hearing aids giving specific illustrations (20 marks)

**QUESTION FIVE (20MARKS)**

Explain how a cochlea implant functions giving specific significance to a hearing-impaired learner. (20 marks)