



MACHAKOS UNIVERSITY

University Examinations 2019/2020 academic year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, SPECIAL NEEDS EDUCATION

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF EDUCATION (SPECIAL NEEDS EDUCATION)

ESN 455: AUDIOLOGY AND ELECTROACOUSTIC

DATE: 21/10/2020

TIME: 2.00-4.00 PM

INSTRUCTIONS

Answer Question One and Any Other Two Questions

QUESTION ONE (30 MARKS)

- a) Define the following terms as used in audiology
 - i. Audiology (1 mark)
 - ii. Hearing (1 mark)
 - iii. Amplification (1 mark)
 - iv. Hearing loss (1 mark)
- b) Differentiate between speech production and speech perception (4 marks)
- c) Describe what Educational Audiology is (2 marks)
- d) Explain the external ear canal in a human being (4 marks)
- e) State the three small bones of the ear in order starting with the one attached to the tympanic membrane (2 marks)
- f) Describe the function of the vestibular system (2 marks)
- g) Explain what an audiometer is (3 marks)
- h) Explain the following terms as used in audiology
 - i. Attenuation (2 marks)
 - ii. Threshold of hearing (2 marks)
- i) Describe the function of the audiogram (4 marks)

QUESTION TWO (20 MARKS)

Discuss sound conduction from the source up to when it gets to the brain in the hearing process

QUESTION THREE (20 MARKS)

Mentioning their function, explain the auditory system in a human being

QUESTION FOUR (20 MARKS)

Discuss the hearing levels classified according to the degree of hearing loss

QUESTION FIVE (20 MARKS)

Explain factors that affect speech reception and production