



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

INSTITUTIONAL BASED PROGRAMME (IBP) – DECEMBER 2011 SESSION

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION

(SPECIAL EDUCATION)

PSE 416: INTRODUCTION TO AUDIOLOGY AND ELECTRO-ACOUSTICS

DATE: Friday, 4th May, 2012

TIME: 11.00 a.m. – 1.00 p.m.

INSTRUCTIONS:

Answer **ALL** questions from Section One and any **TWO** questions from Section Two.

SECTION ONE (30 Marks)

1. Differentiate between rarefaction and compression of sound (2 marks)
2. Explain how audiology qualifies to be a preventive health field (2 marks)
3. Define the following terms:
 - i) Diffraction (1 mark)
 - ii) Reverberation (1 mark)
4. Explain two reasons for referrals for paediatric audiology (4 marks)
5. Differentiate between geriatric audiology and industrial audiology (4 marks)
6. Explain why the sense of hearing is important to children (2 marks)
7. Name the two structures of the inner ear. (2 marks)

8. State the main difference between distraction and cooperative tests of hearing (2 marks)
9. State two qualities of a diagnostic test of hearing (2 marks)
10. Based on the onset of the hearing loss name two types of hearing loss (2 marks)
11. Describe the energy chain in the perception of sound from the environment to the brain. (4 marks)
12. Describe bone conduction in testing of hearing (2 marks)

SECTION TWO (40 Marks)

13. Discuss the role of Audiology in Human Growth and development during the following stages.
a) Infancy (0 – 6 years)
b) School age (6 – 18 years)
c) Adult age (18 years and above)
d) Old age
(20 marks)
14. A child who has failed screening test for hearing has been brought to you for pure tone audiometry testing. Describe the steps you would undertake chronologically in carrying out audiometry test by air conduction. (20 marks)
15. Describe the main components of a hearing aid and their functions (20 marks)
16. Discuss any 4 screening tests of hearing which can be administered to children below four years. (20 marks)