



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2007/2008

**SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF EDUCATION (SPECIAL EDUCATION)**

PSE 117: BIOMEDICAL ASPECTS OF SPEECH AND EHARING

DATE: Wednesday 18th June, 2008

TIME: 4.30 – 6.30 p.m.

INSTRUCTIONS:

Answer ALL questions in Section A and any TWO in Section B.

SECTION A (30 MARKS)

1. Explain the following terms with relevant examples:
 - (a) Servo-system (2 marks)
 - (b) Place of production of a sound. (2 marks)

2. Explain functions of the following and state what would happen if they malfunctioned.
 - (a) Eustachian tube (2 marks)
 - (b) External auditory canal (2 marks)
 - (c) the utride and semi-circular cands (2 marks)

3. Explain the differences between conductive hearing loss and sensorineural hearing loss. (4 marks)

4. Why are children below the age of six years more prone to getting infections of the middle ear cavity? Identify two major cause organisms and how they can be prevented. (4 marks)

5. (a) Explain the side effects of very loud sounds to the auditory chain. (2 marks)
- (b) State the type of hearing loss resulting from this. (2 marks)
- (c) How would you assist a learner with the hearing loss mentioned above in your class. (2 marks)
6. (a) Explain psychological and sociolinguistic effects in a learner with hearing impairment. (4 marks)
- (b) Why do children with profound hearing losses drag their feet? (2 marks)

SECTION B (40 MARKS)

7. Illustrate with a diagram and describe the transmission of sound from the environment to the brain. (20 marks)
8. (a) Explain non-auditory cues you would use for a learner who has difficulties in articulating phonemes /b/, /g/, /m/ and /t/ (10 marks)
- (b) Describe how you would help a learner who has difficulties in articulating /p/ (10 marks)
9. Compare and contrast speech and language development in children with and without hearing impairment from 0-12 months of age. (20 marks)
10. Describe any two syndromes you know and the impact they have on educational development of learners with hearing impairment. (20 marks)
