



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2009/2010
OPEN, DISTANCE AND E-LEARNING EXAMINATION FOR THE DEGREE
OF BACHELOR OF EDUCATION (SPECIAL EDUCATION)

PSE 117: BIOMEDICAL ASPECTS OF SPEECH AND HEARING

DATE: Thursday 22nd July 2010

TIME: 8.00a.m – 10.00am

INSTRUCTIONS:

**ANSWER ALL THE QUESTIONS IN SECTION ONE AND ANY TWO IN
SECTION TWO**

SECTION ONE (30 MARKS)

1. Explain the speech area of brain that is concerned with converting thought into pattern of neuron activation. [2marks]

2. Explain the following terms:
 - a) Servo system
 - b) Speech
 - c) Language [6marks]

3. Identify four characteristics of Ushers syndrome. [4marks]

4. Explain the functions of pharynx in speech production. [2marks]

5. Identify two processes that are involved in decoding the linguistic message for perception. [2marks]

6. State four processes that are necessary for speech and its production. [4marks]
7. Give two examples of each of the following speech sounds:-
- a) Labodentals
 - b) Bilabials
 - c) Laterals [6marks]
8. Describe one technique that can be employed to maintain speech and language children with hearing impairments. [4marks]

SECTION TWO (20 MARKS)

9. Describe stages of language development among children with hearing impairments. [20marks]
10. Explain how otitis media develops, its effects on hearing and possible remedies. [20marks]
11. With the use of a diagram, explain how acoustic of sound occur right from the source to perception. [20marks]
12. You have been requested to conduct an individual speech lesson to allow a learner with hearing impairments who has malarticulation of plosive sounds. Prepare a lesson that will take fifteen minutes to instruct the learner. All necessary resources should be identified. [20marks]