

UNIVERSITY OF ESWATINI
DEPARTMENT OF AFRICAN LANGUAGES AND LITERATURE
FIRST SEMESTER EXAMINATION
NOVEMBER 2019

TITLE OF PAPER: INTRODUCTION TO PHONETICS AND PHONOLOGY

COURSE NUMBER: ALL103/IDE-ALL103

TIME ALLOWED: THREE (3) HOURS

- INSTRUCTIONS:**
- 1. ANSWER THREE (3) QUESTIONS IN ALL.**
 - 2. CHOOSE ONE QUESTION FROM EACH SECTION.**
 - 3. MARKS WILL BE DEDUCTED FOR UNTIDY WORK, WRONG SPELLING, AND UNGRAMMATICAL SENTENCES.**
 - 4. ALL EXAMPLES SHOULD BE GLOSSED.**

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

SECTION A
(Answer Question One)

Question 1

a) Write the IPA symbol representing each of the following phonetic descriptions, and illustrate each of the sounds with a word in a language that contains the sound:

- i) A voiced alveopalatal fricative;
- ii) A voiceless glottal fricative;
- iii) A voiceless labiodental fricative;
- iv) A low back tense vowel;
- v) A voiceless bilabial fricative;
- vi) A voiced alveolar lateral fricative;
- vii) A voiceless alveopalatal ejective affricate;
- viii) A voiceless coarticulated labiovelar stop;
- ix) A voiced velar implosive;
- x) A voiceless alveopalatal fricative;
- xi) A voiced alveolar nasal;
- xii) A voiced lateral liquid;
- xiii) A voiced lateral fricative;
- xiv) A voiced palatal approximant;
- xv) A schwa;
- xvi) A voiceless interdental fricative;
- xvii) A voiceless glottal stop;
- xviii) A low central vowel;
- xix) A high back lax vowel;
- xx) A voiceless velar fricative;
- xxi) A voiced rhotic liquid;
- xxii) A voiced alveolar affricate
- xxiii) A mid tense front vowel;
- xxiv) A low-high back diphthong;
- xxv) A voiced alveolar retroflex fricative;
- xxvi) A voiced interdental fricative;
- xxvii) A voiced glottal fricative;
- xxviii) A voiced labiodental fricative;
- xxix) A voiced bilabial fricative;
- xxx) A voiceless coarticulated labiocoronal stop;
- xxxi) A voiced bilabial implosive;
- xxxii) A low front vowel;
- xxxiii) A voiced uvular fricative;
- xxxiv) A voiced uvular nasal;
- xxxv) A voiceless bilabial aspirated stop;
- xxxvi) A mid tense back vowel;
- xxxvii) A voiceless alveolar retroflex stop;
- xxxviii) A low-high front diphthong;
- xxxix) A voiceless nasalised dental click;
- xl) A voiced lateral click
- xli) A voiceless labialised alveopalatal click;
- xlii) A voiced uvular stop;

(42 marks)

- b) Discuss three disadvantages of using orthography/spelling instead of using phonetic symbols (6 marks)

[50 MARKS]

SECTION B

Choose one question from this section

Question 2

Distinguish between the following linguistic terms and concepts. Give for each argument an example from any language:

- | | | |
|------|--|-----------|
| i) | aspirated and unaspirated | (4 marks) |
| ii) | Pulmonic and glottalic airstream mechanism | (4 marks) |
| iii) | oral and nasal speech sound; | (4 marks) |
| iv) | voiced and voiceless speech sound; | (5 marks) |
| v) | Competence and performance; | (3 marks) |
| vi) | Lexical and structural ambiguity. | (5 marks) |

[25 Marks]

Question 3

- (a) In a spectrogram, there are formants that are not linguistically significant. Name these formants and also what these formants indicate. (3 marks)
- (b) What distinguishes High pitch from Low pitch in a spectrogram? (2 marks)
- (c) Which formant frequencies indicate the following, in vowels? (2 marks)
- | | | |
|-----|----------|-----------|
| i) | Height | (2 marks) |
| ii) | Backness | |
- (d) What is the difference between front and back vowels in terms of formant frequencies? (4 marks)
- (e) What distinguishes the place of articulation in a spectrogram? Discuss, with illustrations from alveolar and velar consonants. (8 marks)
- (f) Compare and contrast the formant structures of the following linguistic concepts: (6 marks)
- | | | |
|-----|----------------------|-----------|
| i) | nasal and laterals; | |
| ii) | stops and fricatives | (6 marks) |

[25 Marks]

SECTION C

Choose one question from this section

Question 4

a) Consider the data from KiSwahili provided below and do the tasks which follow:

beba	'carry on the back'
damu	'blood'
ndege	'bird'
mbovu	'rotten'
ngapi	'how many'
giza	'darkness'
habari	'news'
funga	'fasten'
mbaja	'bad'
wadogo	'little ones'
ndizi	'banana'

- (i) List all the pairs of allophones found in the data. (3marks)
- (ii) State the distribution of the allophones you listed in (i) above. (3 marks)
- (iii) Provide a phonemic transcription for the first **five** items presented in the data. (5 marks)
- b) Distinguish between accidental gaps and systematic gaps. (4 marks)
- c) Using distinctive features, formalize the following phonological rules:
- i) A voiceless alveolar stop becomes voiced word-finally. (4 marks).
- ii) The sequence /a/ /u/ becomes [o] when a morpheme boundary intervenes between them. (6 Marks)

[25 Marks]

Question 5

a) Consider the data below from Inuktitut a language spoken by native Canadians then do the tasks that follow:

iglumut	"to a house"
ukiaq	"late fall"
aiviq	"walrus"
aniguvit	"if you leave"
aglu	"seal's breathing hole"
iglumit	"from a house"
anigavit	"because you leave"

pinna	“that one up there”
ani	“female’s brother”
iglu	“house”
panna	“that place up there”
aivuuq	“she goes home”
ini	“place, spot”
ukiuuq	“winter”

- i) List all the minimal pairs found in the data. (7 Marks)
- ii) Give all the vowel phonemes in Inuktitut, based on the given data. (3 Marks)
- b) What distinctive feature, if any, do the following sets of sound segments share?
- i) vowels and semi vowels;
- ii) consonants and vowels;
- iii) stops and affricates; (5 Marks)
- iv) bilabials and rounded vowels;
- v) liquids and semi vowels
- c) Using distinctive features, formalize the following rules:
- i) A voiceless consonant becomes voiced intervocalically. (3 marks)
- ii) A voiceless stop becomes voiced between vowels. (4 Marks)
- iii) The vowel /i/ is deleted before the vowel /e/. (3 marks)

[25 Marks]