

UNIVERSITY OF SWAZILAND  
DEPARTMENT OF AFRICAN LANGUAGES AND LITERATURE  
RESIT EXAMINATION 2016

**TITLE OF PAPER: INTRODUCTION TO PHONETICS AND PHONOLOGY**

**COURSE NUMBER: ALL103**

**TIME ALLOWED: THREE (3) HOURS**

- INSTRUCTIONS:**
- 1. ANSWER FOUR (4) QUESTIONS IN ALL.**
  - 2. CHOOSE ONE QUESTION FROM EACH SECTION AND THE FOURTH QUESTION FROM EITHER SECTION A OR SECTION B.**
  - 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  
PHONETICS**

*Answer Question one and any other question from this section*

**Question 1**

- (a) Vowel sounds with the same length can differ from one another in pitch, loudness and quality. Explain. (6 marks)
- (b) In a spectrogram, there are formants that are not linguistically significant. Name these formants and also what these formants indicate. (3 marks)
- (c) What distinguishes High pitch from Low pitch in a spectrogram? (2 marks)
- (d) Which formant frequencies indicate the following, in vowels? (2 marks)
- i) Height
  - ii) Backness
- (e) What is the difference between front and back vowels in terms of formant frequencies? (4 marks)
- (f) What distinguishes the place of articulation in a spectrogram? Discuss, with illustrations from alveolar and velar consonants. (8 marks)

**[25 Marks]**

**Question 2**

- (a) The following transcription represents one person's reading of this passage. Write out the passage using Standard English orthography.

[ɪt ɪz pɔsəbl tə trænskraɪb fənetɪklɪ ɛnɪ ʌtrens, ɪn ɛnɪ læŋgwɪdʒ, ɪn sɛvrəl dɪfrənt weɪz  
ɔl əv ðəm juːzɪŋ ðɪ ælfəbet ənd kənvenʃənz əv ðɪ aɪ pɪ eɪ. (ðə seɪm θɪŋ ɪz pɔsəbl wɪð  
mɔwst ɪntənəʃənl fənetɪk ælfəbet) ə trænskɪpʃn wɪtʃ ɪz meɪd baɪ juːzɪŋ letəz əv ðə  
sɪmpləst pɔsəbl feɪps, ənd ɪn ðə sɪmpləst pɔsəbl nʌmbə, ɪz kɔld ə sɪmpl fəwnɪmɪk  
trænskɪpʃn]

[16 Marks]

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

- a. Voiceless glottal fricative
- b. Voiced alveopalatal affricate
- c. Voiced alveolar implosive
- d. Low front unrounded vowel
- e. High tense rounded vowel [9 Marks]
- f. Voiced glottal fricative
- g. Voiced lateral alveolar fricative
- h. Alveolar lateral liquid
- i. High back tense unrounded vowel

**[25 Marks]**

**Question 3**

- a) Provide a three term label description of each of the sounds represented by the following IPA symbols:

[g] [m] [dz] [d] [ʒ] [X] [j] [ŋ]  
 [β] [tʃ] [ʈ] [b] [x] [ŋ] [dʒ] [n]

Example: [f]

**Glottal activity**  
 Voiceless

**Manner**  
 fricative

**Place**  
 labiodental

[25 Marks]

**SECTION B  
 PHONOLOGY**

*Choose one question from this section*

**Question 4**

- 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”
ukiuq	“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) The sequence /a/ /u/ becomes [o] when a morpheme boundary intervenes between them. [6 Marks]
- ii) A voiceless stop becomes voiced between vowels. [4 Marks]

[25 Marks]

**Question 5**

a) In Southern Congo, a Bantu language spoken in Angola, the non-palatal segments [t, s, and z] are in complementary distribution with their palatal counterparts [tʃ, ʃ, ʒ], as shown in the following words:

[tobola]	“to bore a hole”
[tʃina]	“to cut”
[kesoka]	“to be cut”
[ŋkofɪ]	“lion”
[zeŋa]	“to cut”
[ʒima]	“to stretch”
[kasu]	“emaciation”
[tʃiba]	“banana”
[zevo]	“then”
[azimola]	“alms”
[kunezulu]	“to heaven”
[tanu]	“five”

i) Considering the data in (5a) above, state the distribution of each pair of segments given below:

[t] – [tʃ]	
[s] – [ʃ]	
[z] – [ʒ]	[6 Marks]

ii) Which phones should be used as the underlying phoneme for each pair of segments in (5a (i))? State the reasons for your choice. [8 Marks]

b) Study the data from siSwati presented below and answer the following questions:

dʒilit'a	‘take down’
dʒonsa	‘pull’
dʒinja	‘be needy’

d <sup>v</sup> uma	'thunder'
d <sup>v</sup> u6a	'refuse smth.'
lid <sup>v</sup> olo	'knee'
d <sup>v</sup> ula	'hit heavily'
d <sup>z</sup> a6ula	'tear'
d <sup>z</sup> elega	'offend'
d <sup>z</sup> ad <sup>z</sup> e	'sister'

- i) On the basis of the data, are [6] and [m] separate phonemes or allophones of the same phoneme? If you think they are separate phonemes, provide evidence from the data. If you think they are allophones state their distribution.  
[6 Marks]
- ii) Based on the same data, are the phones [d<sup>z</sup>] and [d<sup>v</sup>] separate phonemes of siSwati or are they allophones of the same phoneme. If you think they are separate phonemes, give your reasons. If you think they are allophones state their distribution.  
[5Marks]

[25 Marks]

SECTION C  
MISCELLANEOUS TOPICS

*Answer Question 6*

**Question 6**

- a) Distinguish between the following linguistic terms and concepts. Give for each argument an example from any language:
- i) aspirated and unaspirated (4 marks)
  - ii) voiced and voiceless (5 marks)
  - iii) Pulmonic and glottalic airstream mechanism (4 marks)
- b) The sounds [k] and [f] are associated with different orthographic representations (letters). For each sound, provide at least 3 different examples, from any language. In your examples, underline the part of the word that represents the [k] and the [f] sound.  
[6 Marks]
- c) The combination of letters *ch* can be pronounced in different ways. Provide a minimum of 3 different examples, from any language. For each word you find, indicate the sound that is represented by the combination *ch*.  
[6 Marks]

[25Marks]