UNIVERSITY OF SWAZILAND
DEPARTMENT OF AFRICAN LANGUAGES AND LITERATURE
FINAL EXAMINATION DECEMBER 2016

TITLE OF PAPER: INTRODUCTION TO PHONETICS AND PHONOLOGY

COURSE NUMBER: ALL103

TIVE 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 OR SECTION C.
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 <br> PHONETICS <br> Answer Question one and any other question from this section 

## Question 1

(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?
i) Height (2 marks)
ii) Backness
(d) What is the difference between front and back vowels in terms of formant frequencies?
(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:
i) nasal and laterals;
ii) stops and fricatives (6 marks)
[25 Marks]

## Question 2

a) Provide a three term label description of each of the sounds represented by the following IPA symbols:
$[\mathrm{k}] \quad[\mathrm{w}]$
Example: $[\mathrm{f}]$
[n] [d]
$[6] \quad[\mathrm{b}] \quad[\mathrm{R}] \quad[\mathrm{N}]$
(16 marks)
Glottal activity
Manner
fricative
Place labiodental
b) Transcribe phonetically the siSwati items which follow:

| i) | jova | 'inject' |  |
| :--- | :--- | :--- | :--- |
| ii) | bala | 'count' |  |
| iii) | tsenga | 'buy' |  |
| iv) | phisa | 'brew' |  |
| v) | luhleko | 'laughter' |  |
| vi) | ngena | 'enter' |  |
| viii) | inyama | 'meat' |  |

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ix) yosa 'grill'
x) imfene 'baboon'
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[25 Marks]

## Question 3

(a) Distinguish between the following linguistic terms and concepts. Give for each argument an example from any language:
i) aspirated and unaspirated
ii) voiced and voiceless
iii) Velaric and glottalic airstream mechanism
(b) Using the phonetic alphabet, transcribe the following English words as you pronounce them in casual speech:
i) children
ii) accept
iii) coughs
iv) through (10 marks)
v) phonetics
[25 Marks]

## SECTION B PHONOLOGY <br> Choose two questions from this section

## Question 4

(a) 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
b) Using phonetic cover terms formalize the rules expressed in ordinary English words:
i) A glide is inserted between vowels.
ii) A consonant is deleted when it occurs before another consonant.
iii) Voiceless stops are aspirated in word-initial position. (4 marks)
c) Using distinctive features, formalize the following rules:
i) A vowel is nasalized when it occurs before a nasal consonant
ii) A voiceless consonant becomes voiced between vowels
iii) Voiced stops are phonetically realized as voiceless segments in word-final position.
iv) A labial consonant is inserted between the vowel $/ 0 /$ and $/ \mathrm{u} /$. (12 marks)
d) Using examples from any language, distinguish between a minimal pair and a near minimal pair, (4 marks)

## SECTION C MISCELLANEOUS TOPICS Choose one question from this section

## Question 5

a) Using distinctive features, formalize the following phonological rules:
i) A voiced bilabial stop becomes a voiced bilabial fricative between vowels.
(4 marks)
ii) The vowel $/ \mathrm{i} /$ is deleted before the vowel /e/.
(3 marks)
iii) A vowel becomes nasalized before an alveolar nasal.
(3 marks)
b) Consider the fotiowing data from Ganda, a language spoken in Uganda, and do the tasks which follow:

| kola | 'do' |
| :--- | :--- |
| wawaabira | 'accuse' |
| lwana | 'fight' |
| buulira | 'tell' |
| lya | 'eat' |
| omugole | 'bride' |
| effirimbi | 'whiste' |
| olulimi | 'tongue' |
| wulira | 'hear' |
| omuliro | 'fire' |
| eddwaliro | 'hospital' |
| jjukira | 'remember' |

(i) Are the liquids [1] and [r] allophones of the same phoneme in Ganda or do they belong to separate phonemes?
(1 mark)
(ii) If you believe they belong to separate phonemes, give evidence from the data. If you believe they are allophones of the same phoneme, list the conditioning environments.
b) With the aid of examples from any language, define each of the following linguistic terms and concepts.
(i) allomorph;
(ii) accidental gaps;
(iii) allophones in free variation

## Question 6

a) Discuss five ways in which a language can enlarge its vocabulary. ( 15 marks)
b) Consider the data from Swahili provided below and do the tasks which follow:

| 6efa | 'carry on the back' |
| :--- | :--- |
| damu | 'blood' |
| mbovu | 'rotten' |
| giza | 'darkness |
| ngapi | 'how many' |
| habari | 'news' |
| ndege | 'bird' |
| funga | 'fasien' |
| mbaja | 'bad' |
| wadogo | 'little ones' |
| ndizi | 'banana' |

(iii) List all the pairs of allophones found in the data.
(3marks)
(iv) State the distribution of the allophones you listed in (i) above. (3 marks)
(v) Provide a phonemic transcription for the fist four items presented in the data.
(4marks)
[25 marks]

## Question 7

a) Indicate the phonetic sym presented below:

| -cons |
| :--- | :--- |
| +son |
| -back |
| +high |
| -round | | -cons |
| :--- |
| -son |
| -cont |
| -voiced |
| +dorsal |
| -del rel |

b) Consider the data belor

| sulat | 'wri |
| :--- | :---: |
| sinulat | 'was |
| susulat | 'will |
| basag | 'bre: |
| binasag | 'was |
| bumabasag | 'is b |
| babasag | 'will |

Describe the process invol
i) past tense;
ii) present tense progri
iii) future tense.
d) The following words are al

## cats

wishes
languages
pegs
taps
books
stitches
ferms
pads
(i) List the allo
(ii) Which allon
(iii) State in wor presence of morpheme.

