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

TITLE OF PAPER: ADVANCED PHONOLOGY

COURSE NUMBER: ALL207

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS:
1. ANSWER FOUR (4) QUESTIONS IN ALL.
2. CHOOSE TWO (2) QUESTIONS FROM SECTION A.
3. CHOOSE TWO (2) QUESTIONS FROM SECTION B
4. LINGUISTIC EXPRESSIONS AND FORMALISM SHOULD BE USED WHENEVER APPROPRIATE.

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SECTION A

Answer any two questions from this section

Question 1

Kikuyu verb conjugation

The following forms illustrate two verb tenses in Kikuyu. Tones are indicated as follows:

à = high
a = low (unmarked)

A. Current imperfect
1. ‘We are V-ing’
   tororava totomáva
2. ‘We are V-ing him/her’
   tomarorava tomodtomáva
3. ‘We are V-ing them’
   tomarorava tomatomáva
4. ‘They are V-ing’
   móravá mátomáva
5. ‘They are V-ing him/her’
   móravá mátomáva
6. ‘They are V-ing them’
   mátomáva mátomámavá

B. Current past
7. ‘We V-ed’
   totoriré, totomiré
8. ‘We V-ed him/her’
   tomaroriré tomodtomiré
9. ‘We V-ed them’
   tomaroriré tomatomiré
10. ‘They V-ed’
    móriré mátomiré
11. ‘They V-ed him/her’
    móriré mátomiré
12. ‘They V-ed them’
    mátomiré mátomámiré

a) Identify the following morphemes, ignoring the tone:

‘Look at’
‘Send’
‘1st person plural subject’
‘3rd person plural subject’
‘3rd person singular object’
‘3rd person plural object’
‘Current imperfect’
‘Current past’

(8 marks)

b) Propose an underlying tone for each of the morphemes you identified in (a) above.

(8 marks)
ALL207 (MAIN EXAM)

**Question 2**

(a) Using illustrations, give a brief description of the following linguistic terms:

i) tone melody;  
ii) contour tone;  
iii) Obligatory Contour Principle; and  
iv) tone stability

(b) Each of the languages below illustrates a different kind of pattern of word stress. Stress is indicated by either an acute accent mark or a grave accent over the vowel of the syllable that is stressed. Describe (in words) the stress pattern of each language.

1. **Huasteco**
   
   (i) cijó:k 'chin'  
   (ii) yår:i:l 'many times'  
   (iii) ?ał:ulom 'field of garlic'  
   (iv) ?ałabé:l 'pretty'  
   (v) bí:nomac 'one who gave'  
   (vi) hilkomá 'leftover'  
   (vii) cálam 'shade'

2. **Pintupi**
   
   (i) páná 'earth'  
   (ii) tútuya 'many'  
   (iii) málawana 'through from behind'  
   (iv) pūlíŋkálat’u 'we (sat) on the hill'  
   (v) támulimpát’óŋku 'our relation'  
   (vi) tiliŋulámpat’u 'the fire for our benefit flared up'

3. **Mpakwiti**
   
   (i) thụ?u  
   (ii) pā:ná  
   (iii) kálipwa  
   (iv) dré:gwati
In the examples stress is indicated as follows:

\( \ddot{\text{a}} = \text{primary stress} \)

\( \dot{\text{a}} = \text{secondary stress} \)

[25 marks]

Question 3

a) Use distinctive features to formalize the following phonological rules:

i) When two non-labial high vowels follow each other the non-labial glide is inserted between them. (4 marks)

ii) When two labial high vowels follow each other the labial glide is inserted between them. (4 marks)

iii) Using the alpha notation, collapse rules (i) and (ii). (4 marks)

b) Using illustrations, give a brief description of the following linguistic terms:

i) A trochaic foot  
ii) Apocope (9 marks)

iii) Partial regressive assimilation

c) Syllabify the following words:

i) syntax (4 marks)

ii) introduction

[25 marks]

SECTION B

Answer any two questions in this section

Question 4

(a) The following data on Tamil language indicate that some words begin with glides while others do not:
Initial j-glide | Initial w-glide | No initial glide
---|---|---
1. jeli | 'rat' | 6. wo:di | 'break'
2. ji: | 'fly' | 7. wo:la: | 'palm tree'
3. jilaj | 'leaf' | 8. wu:si | 'needle'
4. je:ge | 'where' | 9. wujir | 'life'
5. jiqupp | 'waist' | 10. wo:ram | 'edge'

Using your knowledge of natural classes, make a general statement about the distribution of the glides. (2 marks)

Assuming the glides are not present in the underlying representations, name the process that accounts for their presence in the surface forms. (1 mark)

Using distinctive features, write a rule using alpha notation that formalizes this process. (4 marks)

(b) In Southern Kongo, a Bantu language spoken in Angola, the non-palatal segments [t, s, z] are in complementary distribution with their palatal counterparts [\(\tilde{t}\), \(\tilde{s}\), \(\tilde{z}\)] as shown in the following words:

| [tobola] | 'to bore a hole' | [\(\tilde{t}\)ina] | 'to cut' |
| [tanu] | 'five' | [\(\tilde{t}\)iba] | 'banana' |
| [kesoka] | 'to be cut' | [nkot] | 'lion' |
| [kasu] | 'emaciation' | [nselele] | 'termite' |
| [kunezulu] | 'heaven' | [a:\(\tilde{z}\)imola] | 'alms' |
| [nzwe] | 'our' | [lolo\(\tilde{z}\)i] | 'to wash house' |
| [zevo] | 'then' | [zenga] | 'to cut' |
| [\(\tilde{z}\)ima] | 'to stretch' |

State the distribution of each pair of segments given below:

- [t] | [\(\tilde{t}\)] (6 marks)
- [s] | [\(\tilde{s}\)]
- [z] | [\(\tilde{z}\)]

State, in words, one phonological rule that will derive all the phonetic segments from their phonemes. Do not state a separate rule for each phoneme, but a general rule for all three phonemes you listed in (b) above. (4 marks)

(c) Provide a phonetic transcription for each of the following words then divide each word according to its syllables.

a. inconsiderate
b. phonological
Question 5

(a) Study the Shona nouns given below and answer the questions that follow:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>tuma &quot;send&quot;</td>
<td>N-tuma (\rightarrow) ndume &quot;messenger&quot;</td>
</tr>
<tr>
<td>iresa &quot;carve&quot;</td>
<td>N-iresa (\rightarrow) mbeso &quot;adze&quot;</td>
</tr>
</tbody>
</table>

i) Explain how the process of homorganic nasal assimilation operated in the derivation of nouns from verbs in Shona. (4 marks)

ii) Account for the difference in the stem-initial segment in [ndume] and /N-tuma/ in (1) and between [mbeso] and /N-iresa/ in (2) above. (8 marks)

(b) According to Trubetzkoy’s theory of distinctive oppositions:

"The same phonetic segments distinguished by the same phonetic features can stand in privative opposition in one language and in a gradual opposition in another". Provide evidence to support this statement along with relevant examples. (7 marks)

(c) Indicate the phonetic symbol that is represented by each of the following feature matrices below:

i) [-cons, +son, -back, +high, -round]

ii) [-cons, -son, -cont, -voiced, +dorsal, -del rel]

iii) [+cons, +cont, -strid, +cor, +ant, +voiced]

iv) [+cons, +nasal, +cor, +ant] (8 marks)

Question 6

a) Use distinctive features to formalize the following phonological rules:

iii) The sequence \(/a/\~/i/\) is realised a [e] when a morpheme boundary intervenes between them (4 marks)

iv) The sequence \(/a/\~/u/\) is realised a [\(\alpha\)] when a morpheme boundary intervenes between them (4 marks)

v) Using the alpha notation, collapse rules (i) and (ii). (4 marks)
b) Using illustrations, give a brief description of the following linguistic terms:

i) Regressive assimilation;
ii) Suprasegmental feature; (9 marks)
iii) Degenerate foot.

c) Syllabify the following words:

i) Syllabify;
ii) Naughty. (4 marks)

[25 marks]

Question 7

a) In Margi, a language spoken in West Africa, when the definite suffix [-ári] is added to a stem to create a sequence of vowels, there is either vowel gliding or vowel deletion. Notice in the data below that the tone of the suffix varies.

| (i)  | sál | sálári | 'man' |
| (ii) | kúm | kúmári | 'meat' |
| (iii) | tágú | tágwári | 'horse' |
| (iv) | kú | kwári | 'goat' |
| (v) | ú?ù | ú?wári | 'fire' |
| (vi) | hú | hwári | 'grave' |
| (vii) | cédè | cédèrì | 'money' |
| (viii) | fa | fári | 'farm' |

In the examples tone is indicated as follows:

á = high tone
à = low tone

Task

Account for the differences in tone at the surface level. State your solution with autosegmental notation. Support your argument by analysing examples (iv), (v), (vii) and (viii).

(16 marks)
b) Determine and write down the distinctive feature(s) which differentiate(s) the sound segments in each of the following pairs:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>[i, e]</td>
</tr>
<tr>
<td>ii)</td>
<td>[s, z]</td>
</tr>
<tr>
<td>iii)</td>
<td>[N, n]</td>
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<tr>
<td>iv)</td>
<td>[k, x]</td>
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<td>v)</td>
<td>[m, n]</td>
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<tr>
<td>vi)</td>
<td>[w, y]</td>
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<tr>
<td>vii)</td>
<td>[g, d]</td>
</tr>
<tr>
<td>viii)</td>
<td>[t, ts]</td>
</tr>
<tr>
<td>ix)</td>
<td>[a, æ]</td>
</tr>
</tbody>
</table>

(9 marks)