

English 228
Phonology

First Semester 2002-03
Prof. Kassim Shaaban

FINAL TEST (One Hour)
January 21, 2003

Name: _____ Student #: _____

Answer the first two questions and any two of the remaining four questions.

1. Mark the following statements as TRUE or FALSE. (25 points)

- _____ a. The secondary articulation palatalization is characterized by the raising of the back of the tongue.
- _____ b. The Arabic language has no geminates.
- _____ c. The retroflex sound [r] is marked by the general lowering of the third formant on a spectrogram.
- _____ d. It is relatively easy to define syllables but hard to identify them
- _____ e. English and German have variable word stress while French has fixed phrase stress.
- _____ f. Children and women normally speak at a higher pitch than men do.
- _____ g. Waveforms provide more detailed information about sounds than spectrograms do.
- _____ h. The difference between the first two formants (F2-F1) of a sound is a good predictor of its height.
- _____ i. Approximants have formant structures similar to those in vowels, but a little fainter.
- _____ j. Rhotacization is one type of secondary articulation.
- _____ k. English has a tendency to avoid having main stresses too close together.
- _____ l. Vowel rounding is determined by the width of the pharynx.

2. Fill in the blanks in the following sentences with the appropriate terms. (25 points)

- a. The greatest challenge to specialists in speech synthesis relates to the areas of stress and _____.
- b. A _____ may be defined as the movement from one vowel to another within a single syllable.
- c. A syllable can be divided into _____ and rhyme. The rhyme part can be further divided into a _____ and a coda.
- d. Velarization is a _____ articulation that involves raising the back of the tongue while labialization involves the _____ of the lips.
- e. Some women sound like women because they have a _____ pitch.
- f. The emphatic sounds (mufakhkhamat) in Arabic involve the pulling back of the _____ of the tongue and depression of its _____ part.
- g. Nasalization involves _____ the soft palate so that the air may go out through the nose.

3. Make a broad phonemic transcription of the following conversational style utterances. (25 points)

a. Would you like to have sugar and cream in your coffee, sir. .

[]

b. Noam Chomsky is the father of generative-transformational grammar.

[]

c. Uvular sounds are relatively easy to make for speakers of all languages.

[]

d. Speech synthesis and speech recognition are parts of the same process.

[]

e. Your friend is the most illustrious opportunist I have known.

[]

4. Explain how acoustic phonetics, especially in the area of spectrographic analysis, has helped phoneticians better understand the following (4 out of 6): (25 points)

a. Height and backness of vowels

b. Classification of sounds into sibilants, voiced, nasals, liquids, and vowels

c. Gender differences in pitch

d. Intonation patterns of utterances

e. Vowel length before voiced and voiceless consonants

f. Differences among individual speakers

5. (A). Explain why people differ in their judgments of the number of syllables in the following words: (15 points)

a. Steal:

b. Obligatory:

c. Frightening:

d. Happier:

e. Schism:

(B). Explain the sonority theory of syllabicity and show its shortcomings. If needed, you may write the answer on the back of this page. (10 points)

6. Define six of the following eight terms and give examples of each. (25 points)

1. Syllabic consonants:

2. Sound loudness:

3. Vowel quality:

4. Sentence stress:

5. Syllabic prominence:

6. Cardinal vowels:

7. Tone languages:

8. Secondary Articulation:

G O O D L U C K