Phonetics and Phonology Problems (Total: 35 points)

Question 1 (10 points)

Attempt the Italian phonological problem below (each question in this section is worth 2 points each):

Standard Italian

Consider the following data from Standard Italian, an Indo-European language of the Romance family, spoken in Italy. Answer the questions that follow.

a. [tinta]	'dye'	g. [tiŋgo]	'I dye'
b. [tɛnda]	'tent'	h. [tεŋgo]	'I keep'
c. [dantsa]	'dance'	i. [fuŋgo]	'mushroom'
d. [nero]	'black'	j. [bjaŋka]	'white'
e. [dʒɛnte]	'people'	k. [aŋke]	'also'
f. [sapone]	'soap'	1. [faŋgo]	'mud'

- i) Write down all the minimal pairs in the data.
- ii) What can you conclude from the minimal pairs in the data?
- ii) State the phonetic environment in which the sounds [n] and [n] appear.
- iii) Identify any natural classes in the environments you indentified for the previous question.
- iv) Are the sounds [n] and [n] complementary or contrastive distribution? Please explain your answer.
- v) Are [n] and [ŋ] allophones of the same phoneme or are they allophones of different phonmes? Explain your answer.

Question 2 (10 points)

Answer both parts of this question pertaining to syllable structure:

- i) Write a short note on the structure of the syllable after referring to the relevant Section in Chapter 7 of the Fromkin textbook (5 points).
- ii) Transcribe 5 words from your native language using IPA and provide a rough sketch of the syllable structure of your language. You may consult a reference grammar of your own language. This exercise will definitely help you get started on your course project (5 points).

Question 3 (5 points)

Write the IPA symbol that corresponds to each of the following phonetic descriptions, then provide an English word that contains this sound:

- a. voiceless bilabial unaspirated stop
- b. low front vowel
- c. lateral liquid

- d. velar nasal
- e. voiced interdental fricative

Question 4 (10 points)

Please read the book chapter titled "Writing Systems" posted on moodle. You may need to refer to other sources like the following as well: 1. Online encyclopaedia of languages and writing systems: https://www.omniglot.com/ 2. Languages of the World by Kenneth Katzner, 1975, New York: Funk & Wagnalls. For each language below, answer the 2 questions below:

- i) Match the ten samples of writing and the ten languages. There are enough hints in this chapter to get most of them. (The source of these examples, and many others, is
- ii) What is the kind of writing system that each language uses?

a.	Cherokee	1.	仮に勝手に変えるようなことをすれば、
b.	Chinese	2.	Κι ό νοῦς του άγκάλιασε πονετικά τὴν Κρήτη.
c.	German (Gothic style)	3.	«Что это? я падаю? у меня ноги подкашиваются»
d.	Greek	4.	וְהָנֶה ! בְּאַתַרִית הַנְּמִים נָבּון וְהָנָה הַר
e.	Hebrew	5.	Saá sáre ýi běn atskyé bí á mpôtoro áhys
f.	Icelandic	6.	既然必须和新的群众的时代相结合.
g.	Japanese	7.	JET DO JEBE CWY COLL.
h.	Korean	8.	Pótt þú langförull legðir sérhvert land undir fót,
i.	Russian	9.	Pharao's Unblick war wunderbar.
i	Twi	10	시의 시는 토토하 អ 제