

Question A: Orkhon place names

15 points

1.	A	B	C	D	E	F	G	H	I	J	K
	6	8	11	7	1	10	5	4	9	2	3

2. (a) Bukhara [or: Bokhara] (b) Şamarkand (c) Iteke.....

EXPLANATION

This is a fairly straightforward cipher, once you realise that the writing direction is right-to-left. The language has vowel harmony, i.e. all the vowels in a given word share a feature, in this case “backness” (front vs back). Front vowels are i,ü,ö,e and their back equivalents are ı (not seen here),u,o,a respectively. However, the Orkhon script uses the same character for some front and back vowel pairs (a/e in this problem but also i/ı) while the other two vowel symbols are shared between two vowels (front ö/ü, and back o/u).

Furthermore, most of the consonant characters have two different forms, one for front vowels, the other for back vowels (exceptions in this problem are ş, m and ng which always look the same). For these reasons, in 2(a) we allow both *Bukhara* and *Bokhara*, but we know the vowel must be *a* rather than *e*, because the vowels must “harmonize” so in this case must all be back vowels. This is reinforced by the fact that the symbol for *r* is the one that co-occurs with back vowels. Similarly in 2(b) all the symbols are for back-vowels (students may also have heard of this place name). But in 2(c) they are front vowels (i and e).

Question B: Hausa

15 points

1. (a) Kande waited for her son.....
(b) Their tall daughter gazed at your aunt.....
(c) The clever uncle listened to his son.....
2. (a) **Yarinyar dogon tana jiran innarta**.....
(b) **Danku wayo yana kallon kawunna**.....
(c) **Tsohuwa dogon tana sauraren Kande**

EXPLANATION

Word order is SVO, adjectives follow the noun.

Possessive pronouns appear as suffixes on the noun: **-na** ‘his’, **-ta** ‘her’, **-ku** ‘your’, **-su** ‘their’

The auxiliary verb agrees with the gender of the subject: **tana** for females, **yana** for males.

Kande is therefore a feminine name, occurring with the **tana** auxiliary, and the **-ta** (rather than **-na**) suffix on **dan** ‘son’ in 1a.

Vocabulary as follows:

Nouns: **dan** ‘son’, **diyar** ‘daughter’, **innar** ‘aunt’, **kawun** ‘uncle’, **tsohwa** ‘old woman’, **yarinyar** ‘girl’

Adjectives: **dogon** 'tall', **matashi** 'young', **wayo** 'clever'

Verbs: **jiran** 'wait for', **kallon** 'gaze at', **sauraren** 'listen to'

Note that 'the' is not translated, and the prepositions are included in the verb meanings

Question C: Kipsigis

(20 points)

1. (a) You (pl) said that the children ate.....
(b) They told me that you (pl) really drank the water
2. (a) **komwaa kolë koäë viig**
(b) **koimwaaän ilënjan koöön tuga**.....
(c) **koämwaawoog älä koit tuga**

EXPLANATION

Sentence structure is VOS. All the verbs begin with **ko-** the meaning of which therefore we can only guess. There then follows the subject pronoun (see below), then the verb stem, **mwaa** 'told/said', **it** 'arrived', **ruuya** 'was/were sleeping', **amišye** 'ate', **ë** 'drank', **öön** 'drove away'. A pronoun object if any follows, as below.

The marker of the complement clause agrees with the subject of the main verb with identical affixes, see below, with the addition of **kö** for 'they'. If the following clause is emphasized (as indicated by the word 'really'), the complement marker takes an additional suffix: there are four such cases (including one in the test data, in 1(b)), all different, but a pattern of similarity with the object markers suggests agreement with the object of the main clause.

Affixes:

Person	Subject	object	Prefix to lë	Suffix to lë showing emphasis
I	ä	än	ä	Inferred njän
you (sg)	o	woog	o	Inferred njoog
we	ki	weeč	ki	njeeč
you (pl)	i	un	Inferred i	njin
they	blank	či	kö	nji

The following nouns are found:

lagok 'children', **tuga** 'cows', **viig** 'water', **ndaarët** 'snake'.

Question D: Warlpiri

(20 points)

1. (a) The dog will run
(b) The woman didn't chase the father
(c) The child fell.....

2. (a) **Malikingku kulaka warna purraja**.....
- (b) **Kartangku ka kurdu puraja**
- (c) **Maliki ka purrami**

EXPLANATION

Word order is S Aux O V

The subject is marked by the suffix **-ngku** if the sentence is transitive (ie the verb has an object).

The auxiliary is **ka** for positive, **kulaka** for negative, **kapi** for future.

The verbs are marked for tense: **-mi** (present), **-ja** (past). There are actually five distinct conjugations of verbs in Warlpiri, each taking five different tense endings. These verbs are all from the first conjugation.

Vocabulary:

nouns - **kurdu** 'child', **kirda** 'father', **karnta** 'woman', **maliki** 'dog', **ngaya** 'cat', **warna** 'snake'

verbs – **wangka-** 'speak', **parnka-** 'run', **pura** 'chase', **purra** 'bite', **wanti** 'fall'

Don't be too confused by the apparently similar **pura** 'chase' and **purra** 'bite': actually **r** and **rr** are separate phonemes (i.e. regarded as different letters), like in Spanish.

Question E: Yoruba

(30 points)

1. (a) Today, Goke bought delicious yams [adverb also OK at end]
- (b) It was the black cat that father saw
- (c) Yesterday, father and mother sold fish [adverb also OK at end].....
- (d) It was mother's clothes that Tolu washed
2. (a) **Tolú ú ta iṣu didun un bàbá lánàá**.....
- (b) **Ìyá a ore é mọ olè**
- (c) **Ẹja a ológbò ni bàbá wò**
- (d) **Ìwé dúdú u ìyá ni olè tà**.....

Adverb can also appear at end of sentence. Articles and possessive pronouns are optional

EXPLANATION

Sentence structure: Normal structure (subject emphasis) is S v* V O. The verb has mid tone (no diacritic).

The subject marker v* mirrors the final vowel of the subject, but with a high tone (')

With object emphasis ('It was O that S Vd): O **ni** S V with a falling tone on the V (`) and no subject marker.

In both cases, adverbs of time can be added at the end

Within noun groups, the genitive: 'B of A' or 'A's B' is B v* A where v* mirrors the final vowel of the preceding word but with mid tone (i.e. no diacritic).

Adjectives follow the noun.

Vocabulary list:

Nouns: **iṣu** 'yams', **ẹja** 'fish', **aṣo** 'clothes', **ìyá** 'mother', **ìwé** 'book', **bàbá** 'father', **olè** 'thief', **ológbò** 'cat'; **ore** 'friend'

Adjectives: **dúdú** 'black', **dídùn** 'delicious'

Verbs: **ta** 'sold', **fọ** 'washed', **wo** 'saw', **ra** 'bought', **mọ** 'knew'

Adverbs: : **lónìí** 'today', **lànàá** 'yesterday'.