AILO 2019 Round 2 Solutions

Question A: Writing up in Hanunó'o

A1.

1	2	3	4	5	6	7	8	9
H	I	D	C	B	A	F	G	E

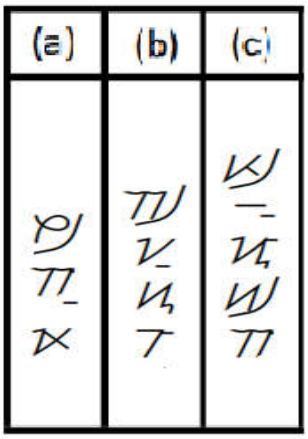
A2. (a) kang

(b) manimisu

(c) mangyan

(d) sibuyan

A3.



Comments: Hanunó'o is an abugida, that is, each symbol represents a consonant+vowel combination; but more significantly, and unusually, it reads bottom to top rather than top to bottom. By default, full letters represent consonant + *a*. Diacritics (lines above or below the letter) change the vowel to *i* or *u*. A curved line to the bottom right of the letter (*padmudpod*) represents the absence of a vowel. Note that one of the symbols represents a vowel on its own: by default *a,* but with the diacritics *i* or *u*.

Question B: Harmongolian

B1. (a) negrüü (b) šülegüüd (c) šülegrüü

(d) nökör nar (e) nökörlüü (f) dargačuud

(g) dargaruu (h) ['darɢa] (i) ovoguud

(j) ovogruu

B2. Künda is a loan word because ….. it mixes the vowels

B3.

	plural	directive	pronunciation
(a) *haančlah*	haančlah nar	haančlahruu	['xa:ntʃlax]
(b) *gürvel*	gürvelüüd	gürvelrüü	['ɢyrvel]
(c) *delgüür*	delgüürüüd	delgüürlüü	[del'gy:r]
(d) *zuun*	zuunuud	zuunruu	[zu:ŋ]
(e) *čanar*	čanaruud	čanarluu	['tʃanar]

B4. Write your explanation on the last page or on extra pages if necessary

Mongolian displays vowel harmony. Vowels are divided into two categories: *front* (*e, ö, ü*) and *rear* (*a, o, u*) depending on the position of the tongue in the mouth. In native Mongol words, either all vowels are FRONT or all vowels are BACK.

- To form the plural:
  - use the word *nar* for human nouns;
  - otherwise, add *-ch-* if the noun ends with a vowel;
  - add *-üüd* if the vowels are FRONT, otherwise *-uud*
- To form the directive:
  - add *-l-* if the noun ends with *-r*, otherwise, *-r-*;
  - add *-üü* if the vowels are FRONT, otherwise *-uu*
- To find the pronunciation:
  - h → [x]
  - u → [ʊ], ö → [ɵ], ü → [u]
  - in FRONT-vowel words, g → [g]; in BACK-vowel words, g → [ɢ]
  - Stress falls on the leftmost long vowel. If there are no long vowels, it falls on the leftmost syllable.

(Note: the Mongolian stress system is much more complex than this, but in the two-syllable words above, this rule suffices. See this paper for more information.)

Question C: Lopit or hate it

C1. (a) oboro iramitait na lebarari

(b) eca haborok ho iromoit de leifuori

(c) eidolo haitiyenani de leguarri

(d) eguar habarak de leramitari

(e) eramita hacak ho iremoit de leibongori

C2. Write your explanation on the last page or on extra pages if necessary

Explanation:
This problem is all about word derivation: Given the root, various prefixes and suffixes form related words: the words given in the examples are in plain text, the words you have to work out are in italics.

(see next page)

Note also that the verb comes first in the sentence, then subject, object and other phrases.
Non-derived words are: Iliwa, Lohidong, Ihidong (names), waraga (paper), mana (field), hingohu (dog), halu (back), haji (house), wurre (children)
Prepositions: ho (with), de (in), na (of)
Adverb: aina (today)

Root	meaning	he/they V	V-er (agent)	v-ers (pl)	tool	place
		e- or o- *	ha - ni	ha - k	i -it	le - ri
itiyena	teach	eitiyena	haitiyenani			leitiyenari
romo	dig	oromo	haromoni	haromok	*iromoit*	
remo	stab	eremo			*iremoit*	
guar	write				iguarit	*leguarri*
boro	be big	oboro	haboroni	*haborok*		
bara	farm		habarani			*lebarari*
ibongo	meet	eibongo				*leibongori*
idolo	sing	*eidolo*	haidoloni			
ca	dance	*eca*		*hacak*		lecari
ifuo	cook	eifuo				*leifuori*
fer	lie	efer			iferit	
iyoma	rest	eiyoma				
ramita	play	eramita			*iramitait*	

* depending on first vowel of the root

Question D: Watch that cow

D1. (a) malħah kotevet ʔagadot ʔaroħot laseħkanim

(b) hameleħ hazeh šamar al haħatulim hatovim

(c) hajaldah hakatonah šamra al hasaħkanah hazot

(d) hakeleb hatov katav miktavim ʔaroħim lamalħot

(e) hajm {kotvut|kotvim} neʔum tov lamelaħim

(f) hu kotev et hamiktav laʔaħbarim

D2. Write your explanation on the last page or on extra pages if necessary

In (e) accept *kotvot* instead of *kotvim* since gender of 'they' is not specified. Actually, *hajm* is masculine (the feminine is *hen*), though this is not stated … but could be reasonably guessed since –*im* is the masculine plural ending.

GRAMMAR (as seen here)
Word-order is SVO. Adjectives (including 'this') come after the noun, and agree in gender (m/f) and number.
Definite article is *ha-* prefixed to both noun and adjective; indefinite article is omitted.
Preposition 'to' or 'for' is a prefix *l-* which forms a portmanteau *la-* with the definite article.
Feminine nouns and adjectives (in these examples) end in *-ah* in singular, *-ot* in plural; masculine nouns/adjectives add *-im* to form plural. If the last vowel of the masculine singular is *e*, change it to *a* (*jeled*/*jeladim*, *sefer*/*sefarim*, *seħken*/*seħkanim*) so plural of *meleħ is melaħim*, and, applying the rule backwards, singular of *kelabim* is *keleb*.

Feminine singular of ‘this’ is *hazot*, even though this looks like a plural.
Definite objects are preceded by a preposition, *al* with ‘watch’, *et* with write, but *et* is omitted if the object is indefinite (no evidence whether *al* is also omitted).
A masculine noun CeCeC can be changed to feminine CaCCah (from *jeled/jaldah* infer ‘king’ is *meleħ* from *malħah*; it is not asked for but ‘bitch’ is indeed *kalbah*). This rule only applies when all the consonants are single. Other masculine nouns simply change any final *e* to *a* and add *–ah* without dropping a syllable, so *seħken/seħkanah* (not *saħknah*)
Verb conjugations are formed by taking the three consonants of the verb and a vowel pattern sometimes with an ending. Verbs agree with the subject in number and gender as per the following table, which shows the relevant patterns for the two verbs used here. Note that masc and fem plural are the same in the past tense.

	ms	fs	mp	fp
pres	CoCeC	CoCeCet	CoCCim	CoCCot
past	CaCaC	CaCCa	CaCCu	

A valid generalisation is that the first vowel indicates tense (*o* present, *a* past), and the coincidence in the present tense plural of the masculine *–im* and feminine *–ot* could be mentioned.
In fact Hebrew has seven different conjugation paradigms, has further forms for 1st and 2nd person singular and plural, 2nd person also having different forms for masculine and feminine; and has a further tense (future), all three tenses having active and passive forms… and a few other verb forms on top of all that. The system of 3-consonant roots is a feature of Semitic languages (also Arabic for example) and goes beyond the verb paradigms, with countless other word derivations possible; for example the root K-T-V seen here as verb ‘to write’ shows up in *miktav* ‘letter’, *maktavah* ‘desk’, *kotev* ‘writer’, *kattav* ‘reporter’, *ktovet* ‘address’, *taktiv* ‘written rule’, *ktiv* ‘spelling’, *liktov* ‘to register’, etc.
Vocabulary (underlined words have to be derived)
Masculine nouns: jeled (boy), sefer (book), seħken (actor), keleb (dog), ħatul (cat), ʔaħbar (mouse), miktav (letter), neʔum (speech), meleħ (king)
Feminine nouns: parah (cow), jaldah (girl), malħah (queen), seħkanah (actress), ʔagadah (story)
Adjectives: tov (good), zeh (this), gadol (big), katon (small), ʔaroħ (long)
Pronouns: hajm (they), hu (he)
Prepositions: et, al, la
Verbs: šamar, katar (the 3rd person masculine singular, past tense, is the dictionary citation form for all verbs, perhaps because it has the simplest vowel pattern. Also it is unique for each of the seven verb paradigms, and so serves to indicate which group a verb belongs to).
Note: the verb *šamar* is more accurately translated as ‘guard’ rather than ‘watch’ (perhaps ‘watch over’ would be a better translation), and *ʔagadah* is not the normal word for ‘story’, rather having the meaning ‘legend’ or ‘tale’.
Finally, Hebrew is normally written without vowels (though there are some “vowel letters” for some initial and final vowels), so for example *jeled* is <JLD>, *jaldah* is <JLDH>, *kotev* and *katav* are both written <KTV> and so on, so the vowel shifts are an added complication for learning to read Hebrew!

Question E: Countdown in Gumatj

E1. (a) 2 x 1 = 2 (b) 16 + 6 = 22

(c) 3 + 18 = 21 (d) 7 +1 = 8

(e) 3 x 4 = 12 (f) 8 + 13 = 21

E2. (a) 1 (b) 23 (c) 11

E3. (a) 19 + 21 = 40 (b) 16 x 2 = 32

(c) 8 x 8 = 64 (d) 12 x 10 = 120

(e) 125 x 2 = 250

E4. (a) dambumirri ga marrma rulu ga lurrkun

(b) lurrkun dambumirri ga marrma rulu

(c) dambumiriw dambumirri ga wanggang rulu ga wanggang

E5. rulu means 'bundle'

E6. Explanation (continue overleaf if necessary)

This is a base-5 counting system
The numbers 1 to 4 are 1 = wanggang, 2 = marrma, 3 = lurrkun, 4 = dambumiriw
Numbers from 5 to 24 are expressed as A *rulu* [*ga* B], where *rulu* means x5, *ga* is 'and'. [ ] indicates optional elements.
Numbers 25 and above are expressed as [A] *dambumirri* [ga B *rulu*] [ga C], where *dambumirri* is 25.
Note that *rulu* is not '5' but 'x5', so five is '1 rulu'; whereas *dambumirrii* does mean '25' on its own. This is how you know *rulu* is not actually the name of a number.