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# AILO

All Ireland Linguistics Olympiad  
*The Problem Solvers' Challenge*

## Preliminary Round

January 2023

2 Hours

Plus ½ hour for data entry to online answer sheet

# PROBLEM BOOK

*Answer as many of the questions as you can.*

**Write your answers in the answer book provided and  
submit your answers via the online submission link.**

### Questions and credits

A. Gilbertese fruit and flowers	Danylo Mysak	20 points
B. Shizuoka Japanese	Kazune Sato	20 points
C. To and from Perm	Pavel Iosad	20 points
D. This is Mohawk	Babette Newman	20 points
E. Reading Meroitic	Ethan Chi	20 points

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## Question A: Gilbertese fruit and flowers

Gilbertese or *taetae ni Kiribati* is an Austronesian language spoken mainly in Kiribati, with 120,000 native speakers. Kiribati is the former British colony previously called the Gilbert Islands, and the modern name is actually how the word 'Gilbert' is pronounced in this language.

Here are some sentences in Gilbertese with their English translations. Note that *fruit* is singular (i.e. 'a piece of fruit').

<i>A noorii taian uee taian aine.</i>	The women saw the flowers
<i>A kunei taian uee taian aine.</i>	The women found the flowers
<i>A na kunei taian uee taian aine.</i>	The women will find the flowers
<i>A na kunea te uee taian aomata.</i>	The men will find the flower
<i>E na kunei taian uee te aomata.</i>	The man will find the flowers
<i>E nooria te uaa te aomata.</i>	The man saw the fruit
<i>E na noorii taian uee te aine.</i>	The woman will see the flowers
<i>A na kunea te uaa taian aine.</i>	The women will find the fruit

A1. Translate the following into English:

- (a) *E na noorii taian uee te aine.*
- (b) *A kunea te uaa taian aomata.*
- (c) *E na nooria te uee te aine*
- (d) *E kunea taian uee te aine*

A2. Translate the following into Gilbertese:

- (a) The woman found the fruits.
- (b) The women will see the flowers.
- (c) The man found the fruit.
- (d) The women will see the flower.

## Question B: Shizuoka Japanese

The dialect of Japanese spoken in Shizuoka (an area just down the coast from Tokyo, featuring splendid views of Mount Fuji) has a distinctive way of emphasising adjectives, as in the following data. Note that knowledge of standard Japanese will not help in solving this problem. The English meanings are not relevant to the solution of this problem.

Adjective	meaning	emphatic form	meaning
<i>hadena</i>	showy	<i>handena</i>	very showy
<i>ozoi</i>	terrible	<i>onzoi</i>	very terrible
<i>amai</i>	sweet	<i>ammai</i>	very sweet
<i>nagai</i>	long	<i>nangai</i>	very long
<i>shoboi</i>	poor	<i>shomboi</i>	very poor
<i>katai</i>	hard	<i>kattai</i>	very hard
<i>osoi</i>	slow	<i>ossoi</i>	very slow
<i>takai</i>	high	<i>takkai</i>	very high
<i>zonzai</i>	impolite	<i>zoonzai</i>	very impolite
<i>kandarui</i>	sluggish	<i>kaandarui</i>	very sluggish
<i>suppai</i>	sour	<i>suuppai</i>	very sour

Pronunciation: The symbol *ŋ* represents a velar nasal, like the 'n' before a 'g' or 'k' as in 'sing' or 'link'. A doubled letter (consonant or vowel) means that sound is lengthened).

B1. How would the following adjectives be emphasised in Shizuoka Japanese? You do not need to give the English translation.

- (a) *kitanai* 'dirty'      (b) *migamashii* 'humble'      (c) *okkanai* 'scary'  
 (d) *ikai* 'big'      (e) *kibishii* 'strict'      (f) *yasashii* 'easy'  
 (g) *samui* 'cold'      (h) *muzukashii* 'difficult'      (i) *hidoi* 'awful'

B2. What are the plain forms of the following emphasised adjectives?

- (a) *attarashii* 'very new'      (b) *shimbui* 'very rough'      (c) *kondomoppoi* 'very childish'  
 (d) *hissashii* 'very long-standing'      (e) *aanzenna* 'very safe'      (f) *tannoshii* 'very enjoyable'  
 (g) *dongitsui* 'very gaudy'      (h) *riippana* 'very splendid'      (i) *nikkui* 'very hateful'

## Question C: To and from Perm

The Permyak language is spoken by around 60,000 people in Perm Krai in the north-eastern part of European Russia. It belongs to the Finno-Ugric language family, along with Finnish, Estonian, and Hungarian.

There follow 13 words in Permyak together with their meanings in English.

Permyak	English	Permyak	English
<i>k'erkulan'</i>	towards the house	<i>purtala</i>	for my knife
<i>pizannezitlan</i>	of your (sg.) desks	<i>tieztkat</i>	with your (sg.) lakes
<i>ponit</i>	your (sg.) dog	<i>k'erkuezlis'</i>	from the houses
<i>purtnis</i>	their knife	<i>jus's'ezə</i>	my swans
<i>kainnezis</i>	his wolves	<i>kokiskat</i>	with his foot
<i>varalan</i>	of my forest	<i>k'itlan'</i>	towards your (sg.) hand
<i>jus'nala</i>	for our swan		

Pronunciation: The ' symbol indicates a softened consonant, roughly as if followed by a 'y' (so for example *n'* is like in 'onion'). Letters so marked should be considered as single consonants. The *i* and *a* symbols indicate vowels.

C1. Translate the following Permyak words into English.

- (a) *pizanislis'*  
 (b) *varrezlan*  
 (c) *kainnit*  
 (d) *jus'la*

C2. Translate the following English phrases into Permyak.

- (a) his hands  
 (b) my knives  
 (c) of your (pl.) feet  
 (d) for their house

## Question D: This is Mohawk

Mohawk is a Native American language spoken in eastern Canada and northern New York State in the USA. It is considered at risk of extinction as only 900 people speak it in Canada and 2,000 in the USA. The language is known by native speakers as *Kanien'keha* which means 'people of the flint'. The name 'Mohawk' comes from a word meaning 'man-eaters' used by their Algonquian enemies.

Here are some Mohawk sentences with their English translations. The Mohawk language is written with some extra symbols to indicate different pronunciations, such as ' and : ... these are not punctuation symbols. Also, conventionally there are no spaces separating different words. When typing in your answers, take care to spell the words accurately.

Mohawk	English
<i>Wahatiitsiaienta'ne</i>	They caught a fish.
<i>Wahatikwiskwisaienta'ne</i>	They caught a pig.
<i>Hate'sene'otsi'kta</i>	The louse crawls.
<i>Hate'sene'orien:'a</i>	My son crawls.
<i>Kaitsiahihwi</i>	The fish spilled.
<i>Kahsahe'tahihwi</i>	The beans spilled.
<i>Kaitsirakvthikvt</i>	The fish is white.
<i>Kaji:jiarakvthikvt</i>	The flower is white.
<i>Kaitsirakvt</i>	The white fish
<i>Hsahe'taonekwenhtara</i>	Red beans


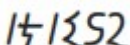
D1.

- What is the Mohawk word for 'fish'?
- Translate into English *hatsi'ktarakvt*
- Translate into Mohawk 'The flower is red'
- Translate into English *wahatitsi'ktaienta'ne*
- If you know that *ien:'a* is 'son', give the Mohawk for 'my'
- If you know that *e:rhar* is 'dog', translate into English *harie:rhararakvthikvt*
- Translate into Mohawk 'The dog crawls'
- Translate into Mohawk 'The beans are red'

## Question E: Reading Meroitic

The Meroitic script was used to write the Meroitic language from the 3rd century BCE, spoken in the Kingdom of Kush (now northern Sudan and southern Egypt).

Here are two words in Meroitic script, along with their transcriptions, and their English meaning, though in this problem the meanings shown are for your information, and are not relevant to finding the solution.

Meroitic	transliteration	meaning
	<i>ata</i>	bread
	<i>apote</i>	messenger

Here are ten more words in Meroitic script (1-10) and their transcriptions (A-J), but in a different order.

3J5X5Z52	1	A	<i>sema</i>	wife
JVII	2	B	<i>anata</i>	priest
4JVII401J	3	C	<i>pelamosa</i>	general
1J4XZ	4	D	<i>qore</i>	ruler
JB52	5	E	<i>apedemaka</i>	(a warrior god)
5W1J	6	F	<i>sate</i>	mother
31J45Z	7	G	<i>palasana</i>	temple overseer
B34Z	8	H	<i>paqara</i>	prince
1J3	9	I	<i>tewiseti</i>	inscription
W1JZ	10	J	<i>kadite</i>	sister

E1. Match up the Meroitic words with their corresponding transcriptions (A-J).

E2. Transcribe the following Meroitic words.

(a) 1J4W5Z (b) 4WJ52 (c) 51J54Z (d) 405X5J

**END OF PAPER**