

# All Ireland Linguistics Olympiad The Problem Solvers' Challenge 

## ROUND ONE

## January 2018

2 Hours

## PROBLEM BOOK

Answer as many of the questions as you can. Write your answers in the answer books provided.

## Questions and credits

A. I know what I saw
B. At ease in Gilbertese
C. Icelandic relations
D. As easy as one, two, three
E. That's not aloud

Harold Somers \& Dick Hudson 20 points
Michael Salter 20 points
Babette Verhoeven 20 points
Michael Salter
Tom McCoy

20 points
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## Question A: I know what I saw

20 points
This problem considers data from Beja (Bidhaawyeet), an Afroasiatic language of the Cushitic branch spoken on the western coast of the Red Sea by the Beja people. Its speakers number around 2 million, and inhabit parts of Egypt, Sudan and Eritrea.

Study the following Beja sentences and their translations:

| Tak rihan | I saw a man |
| :--- | :--- |
| Yaas rihan | I saw a dog |
| Akra tak rihan | I saw a strong man |
| Dabalo tak rihan | I saw a small man |
| Tak akraab rihan | I saw a man that is strong |
| Tak dabaloob rihan | I saw a man that is small |
| Tak akteen | I know a man |
| Rihane tak akteen | I know a man that I saw |
| Tak rihaneeb akteen | I know a man that I saw |

Here are some more words from the Beja language.

| araw | friend |
| :--- | :--- |
| mek | donkey |
| kwati | happy |

A1. Translate the following sentences into Beja. If there are different ways to translate the sentence, show all the alternatives.
(a) I saw a donkey
(b) I saw a happy man
(c) I saw a friend that is happy
(d) I know a strong donkey
(e) I know a dog that is small
(f) I saw a donkey that I know

A2. Translate the following sentences into English. One of them includes a mistake. How could it be corrected?
(a) Kwati mek rihan
(b) Akraab araw akteen
(c) Akteene yaas rihan
(d) Mek dabaloob akteen

## Question B: At ease in Gilbertese

Here are some sentences in the Gilbertese language, with their English translations. Gilbertese is spoken in Kiribati, a country formerly known as the Gilbert Islands, in the central Pacific Ocean.

Ko nakonako $\ddagger k o e$.
E nakonako te aiine.
I takaakaro nai.
E nakonako nakon te titooa Meeri.
A tekateka irarikin te auti taian aiine.
A tebotebo taian nakekei $n$ te bong aei.
I tebotebo inanon te auti yai.
A takaakaro inanon te titooa taian ataei. The children are playing in the shop.
Ko tekateka $\eta k o e$ ningaabong. You will sit tomorrow.
E takaakaro irarikin te kawai te ataei $n$ The child is playing next to the road today. te bong aei.

B1. Rearrange the sentences below into the correct Gilbertese word order, and translate them into English. One of them contains an error. What is it? Give a correct version of the sentence.
(a) Meeri auti e nakon ningaabong te nakonako.
(b) Inanon ŋai kawai i te tekateka.
(c) N aiine a te nakon te bong kawai nakonako te.

B2. Translate into Gilbertese:
(a) The women will play tomorrow.
(b) You are sitting next to the shop today.

## Question C: Icelandic relations

According to Icelandic writer and translator Alda Sigmundsdóttir "Icelanders tend to be fanatically precise when it comes to describing family connections".
Grandparents Björk and Einar have three adult children, son Gunnar, and daughters Alda and Henrika, who in turn are married with children. Here is their family tree: Björk and Einar's children are in a bold textboxes with their spouses and offspring marked with thinner boxes; males are shown in black square boxes accompanied by
 The letter $\partial$ is pronounced like the 'th' in English "brother".


Here are some statements that apply to the family shown here.
Alda er föðursystir Gúdrunur.
Gúðrun er systir Egills.
Egill er bróðir Gúdrunur.
Gunnar er faðir Gúðrunur.
Gúðrun er bróðurdóttir Aldar.
Sigurð er eiginmaдur Aldar.
Egill er sonarsonur Björkur.
Egill er bróðursonur Henrikar.
Gúdrun er frænki Egills.
Einar er frændi Gúdrunur.
Egill er frændi Gúðrunur.
Gúðrun og Helga eru тæðgur.
Alda, Henrika og Björk eru тæðgur.
Egill og Gunnar eru feðgar.
Gúðrun og Gunnar eru feðgin.
Helga og Egill eru тæðgin.
Henrika er kona Björns.
Helga er móðurbróður kona Ragnheiðurs.
C1. Complete the following sentences with the appropriate Icelandic word. Other than for (b), give the most precise term.
(a) Ingvar er $\qquad$ Sigrúnur.
(b) Ingvar er Sigrúnur. (Give an alternative word)
(c) Ingvar er

Einars.
(d) Egill er Aldar.
(e) Sigrún er Einars.
(f) Henrika er Sigrúnur.
(g) Gúðrun er

Björkur.
(h) Sigurð er $\qquad$ Gúðrunur.
(i) Ingvar, Gylfi og Alda eru $\qquad$ . .

C2. As it happens, Helga has a sister, Jóhanna, and a brother, Magnus. Jóhanna is married to Viktor. In Icelandic, this means that:

Magnus er mágur Gunnars.
Jóhanna er mágkona Gunnars.
Viktor er svilar Gunnars.
You meet Magda and she describes herself thus: "Ég er svilkona Gunnars." Explain in English what Magda's relationship to Gunnar is.

C3. If you know that "Björk er tengdamóðir Helgar", complete these statements with the most precise term possible:
(a) Einar er ..................... Helgar.
(b) Björn er ..................... Helgar.
(c) Björn er ..................... Gúðrunur.
(d) Give another simpler Icelandic word to describe Björk's relationship to Helga.

C4. Gunnar's full name is Gunnar Einarsson, but Alda's and Henrika's surname is Einarsdóttir. What are Gúdrun's, Egill's and Gylfi's full names?

## Question D: As easy as one, two, three 20 points

Palauan is an Austronesian language, one of the two official languages (the other being English) of the Republic of Palau in the western Pacific Ocean, and has about 17,000 native speakers. Here are some noun phrases from the Palauan language, with their English translations:
eru ęl buil
ede ęl sils
tede el chad
kloa eql uel
teim ęl sensei
eim ęl rak
elolęm ęl klębęse
klęuid ęl lius
kleai ęl ringo
teai ęl ngalęk
tęruich me a tede ęl buik
tęruich me a eua ęl sikang
ongeru el buil
ongede ęl ureor
two months
three days
three people
four turtles
five teachers
five years
six nights
seven coconuts
eight apples
eight children
thirteen boys
fourteen hours
February
Wednesday

D1. Give the English for the following:
(a) teua ell sensei
(b) tęruich me a kllolęm ęl lius
(c) ongetęruich me a ongeru ę buil
(d) ongeim ęl ureor

D2. Give the Palauan for the following:
(a) eight days
(b) sixteen people
(c) five turtles
(d) June
(e) Thursday

D3. Which version of the Palauan number three would you use to describe
(a) three hours
(b) three girls
(c) three dolphins

## Question E: That's not aloud

## 20 points

This problem deals with five different languages from four different continents, and in particular the sound combinations found in those languages.
For this problem, there are five types of sounds that are especially relevant. These are as follows:

| Vowels | $a, e, i, o, u$ |
| :--- | :--- |
| Consonants | $m, n, y, b, d, g, j, r, l, \check{j}, w, y, p, t, k, f, s, f, h, q, c ̌$ |
| Nasals | $m, n, \eta$ |
| Voiced Consonants | $\mathrm{b}, \mathrm{d}, \mathrm{g}, \mathrm{j}, \mathrm{r}, \mathrm{l}, \mathrm{j}, \mathrm{w}, \mathrm{y}, \mathrm{m}, \mathrm{n}, \mathrm{\eta}$ |
| Voiceless Consonants | $\mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{f}, \mathrm{s}, \mathrm{f}, \mathrm{h}, \mathrm{q}, \mathrm{c}$ |

You don't need to know exactly how these sounds are pronounced in order to solve this problem.
E1. Indonesian, spoken by roughly 200 million people, is the official language of Indonesia. Below are some Indonesian words with their English translations. Fill in the blanks in your answer book.

| meŋuji | to test | diuji | to be tested |
| :--- | :--- | :--- | :--- |
| meŋeja | to spell | dieja | to be spelled |
| meŋgaruk | to scratch | digaruk | to be scratched |
| mendapat | to obtain | didapat | to be obtained |
| memberi | to give | diberi | to be given |
| menulis | to write | ditulis | to be written |
| memutus | to cut off | diputus | to be cut off |
| (a) ........ | to make | dibuat | to be made |
| (b) ........ | to choose | dipilih | to be chosen |

E2. Mandar is one of many local languages spoken in Indonesia. It has about 480,000 speakers. Below are some Mandar words with their English translations. Fill in the blanks in your answer book.

| mambatta | to split | dibatta | to be split |
| :---: | :---: | :---: | :---: |
| manderjeq | to carry on the back | dideทŋeq | to be carried on the back |
| manidan | to crave | diidan | to be craved |
| mappasuך | to send out | dipasun | to be sent out |
| mattunu | to burn | ditunu | to be burnt |
| massiraq | to tie | disiraq | to be tied |
| (c) ......... | to throw | ditimbe | to be thrown |
| (d) ........ | to feed | dipande | to be fed |

E3: The Quechua languages are a group of languages spoken in South America. Below are some words from the variety of Quechua spoken in Puyo Pungo in eastern Ecuador, along with their English translations. Fill in the blanks in your answer book.

| sinik | porcupine | sinikpa porcupine's |
| :--- | :--- | :--- | :--- |
| čilis | steamless region | čilispa steamless region's |
| sača | jungle | sačapi in the jungle |
| punǰa | day | punǰapi in the daytime |
| kam | you | kamba yours |
| atam | frog | atambi on the frog |
| hatum | the big one | (e) ........ the big one's |
|  |  | (f) ........ in the big one |

E4: The Zoque languages are spoken in southern Mexico. Below are some Zoque words with their English translations. Fill in the blanks in your answer book.

| burru | donkey | mburru | my donkey |
| :--- | :--- | :--- | :--- |
| pama | clothing | mbama | my clothing |
| tatah | father | ndatah | my father |
| faha | belt | faha | my belt |
| sis | meat | sis | my meat |
| flawta | harmonica | (g) ........ | my harmonica |
| fapun | soap | fapun | my soap |
| disko | record | (h) ........ | my record |
| kayu | horse | 引gayu | my horse |
| kopak | head | (i) ........ | my head |

E5: Below are some words from the language Lunyole, spoken in Uganda (not to be confused with another language also called Lunyole, which is spoken in Kenya), along with their English translations. Fill in the blanks in your answer book.

| oludaalo | day | endaalo | days |
| :---: | :---: | :---: | :---: |
| oluboyooboyo | hullabaloo | emboyooboyo | hullabaloos |
| olufudu | rainbow | efudu | rainbows |
| olukalala | list | ekalala | lists |
| olusosi | mountain | (j) ......... | mountains |
| olubafu | rib | (k) ......... | ribs |
| olupagi | spoke ${ }^{1}$ | (l) ......... | spokes ${ }^{1}$ |
| olutambi | candle | (m) ......... | candles |

Note: 1. that is, spoke(s) of a wheel
E6. Tying it all together
(i) All five of the languages in this problem have a rule that avoids a specific type of sound combination, specifically a sound of type $X$ cannot be followed by a sound of type $Y$. What are $X$ and $Y$ ? Both $X$ and $Y$ come from the list of sound-types given at the beginning of this problem.
(ii) English does not obey the rule from 6(i). In fact, there is an English word in this bolded sentence that violates this rule. Write the English word from the previous sentence that violates the rule.

## END OF PAPER

