

Ninth International Olympiad in Linguistics  
Pittsburgh (United States of America), July 24–31, 2011

Team Contest Solution

**Distribute at 180 minutes**

A syllable is *guru* if and only if it has a long vowel or a diphthong or ends in a consonant. Division into syllables ignores word divisions. A sequence of type VCV is divided as V-CV; of type VCCV, as VC-CV.

Each line describes the meter in which it's written.

Each of the first 8 syllables of **yamātārājab<sup>h</sup>ānasalagam** stands for the pattern of *lag<sup>h</sup>u* and *guru* syllables in that and the next two syllables. The syllables **la** and **ga** stand for 1 *lag<sup>h</sup>u* and 1 *guru*.

To make a meter's mnemonic, group syllables by threes, and mark the at most two extras at the end with **la** or **ga**.

(a) What is the additional rule of transliteration?

— The vowels *e* and *o* are long, although they are written without macra.

(b) • Deleted words: **jarau**, **lagau**.

• Changed letters:

1. Line 1: *b<sup>h</sup>ujanga-prayātam caturb<sup>h</sup>irgakaraiḥ* < *b<sup>h</sup>ujanga-prayātam caturb<sup>h</sup>iryakāraiḥ*
2. Line 4: *mab<sup>h</sup>alagā gajagatiḥ* < *nab<sup>h</sup>alagā gajagatiḥ*
3. Line 5: *mo go go go vidyunmālā* < *mo mo go go vidyunmālā*

• Words with added macra:

1. Line 2: *gurunid<sup>h</sup>anamān<sup>h</sup>ulag<sup>h</sup>ur iha śāsīkalā* < *gurunid<sup>h</sup>anaman<sup>h</sup>ulag<sup>h</sup>ur iha śāsīkalā*
2. Line 2: *gurunid<sup>h</sup>anamān<sup>h</sup>ulag<sup>h</sup>ur iha śāsīkalā* < *gurunid<sup>h</sup>anaman<sup>h</sup>ulag<sup>h</sup>ur iha śāśīkalā*
3. Line 9: *syad indravājrā yadi tau jagau gaḥ* < *syād indravajrā yadi tau jagau gaḥ*
4. Line 10: *ūpendravajrā prat<sup>h</sup>ame lag<sup>h</sup>au sā* < *upendravajrā prat<sup>h</sup>ame lag<sup>h</sup>au sā*

• Words with deleted macra:

1. Line 1: *b<sup>h</sup>ujanga-prayātam caturb<sup>h</sup>ir gakaraiḥ* < *b<sup>h</sup>ujanga-prayātam caturb<sup>h</sup>iryakāraiḥ*
2. Line 3: *jarau jarau tato jagau ca pañcacamaram vadet* < ... *pañcacāmaram vadet*
3. Line 6: *nanagi mad<sup>h</sup>umati* < *nanagi mad<sup>h</sup>umatī*
4. Line 7: *pramaṇikā* \_\_\_\_\_ < *pramāṇikā jarau lagau*
5. Line 9: *syad indravājrā yadi tau jagau gaḥ* < *syād indravajrā yadi tau jagau gaḥ*

(c) Syllables 2, 3, 4, 6, and 10 are *guru*: **yamātārājab<sup>h</sup>ānasalagam**.