

Proposal to encode the TAKRI SIGN CANDRABINDU

Srinidhi A
srinidhi.pinkpetals24@gmail.com

Sridatta A
sridatta.jamadagni@gmail.com

June 20, 2020

1 Introduction

This document requests to encode the Candrabindu used in Takri script. The details regarding glyph, code point and character name are mentioned below.



U+116BA TAKRI SIGN CANDRABINDU

2 Description

In Indic scripts Candrabindu indicates the nasalization of the vowel or the semi vowel. Candrabindu is attested in several Takri records like manuscripts, inscriptions and primers. The behavior and properties of Candrabindu is similar to Candrabindus found in other Indic scripts like Sharada. In Takri it primarily occurs in sacred sound Om. In Indic scripts Om is written as a combination of o + candrabindu or anusvara or m. Hence we propose to encode Candrabindu in Takri.

3 Character properties

- Unicode character data:
116BA;TAKRI SIGN CANDRABINDU;Mn;0;NSM;;;;;N;;;;;
- Linebreak = CM
- Indic_Syllabic_Category=Bindu
- Indic_Positional_Category=Top

4 References

[1] Leitner, Gottlieb William. *A Collection of Specimens of Commercial and Other Alphabets and Handwritings as also of Multiplication Tables Current in Various Parts of the Panjab, Sind and the North West Provinces*. 'Anjuman-i-Punjab' Press, 1883.

[2] Kaul Deambi, B. K. *Śāradā and Ṭakarī alphabets: origin and development*/Bhushan Kumar Kaul Deambi; foreword by Walter Slaje; table redrawn through computer graphics by Prakash Pandey. Indira Gandhi National Centre for the Arts and DK Printworld, 2008.

[3] Chhabra, B. Ch. "Antiquities of Chamba State, Part II, Medieval and Later Inscriptions." *Memoirs of the Archaeological Survey of India*. Government of India Press, New Delhi (1957).

[4] A manuscript digitized by eGangotri.

<https://archive.org/details/GuruMandaladiPujanVidhi1071GhaAlm5Shlf4SharadaTantra>

[5] <https://twitter.com/MandiKilatra/status/1255066228072169473>

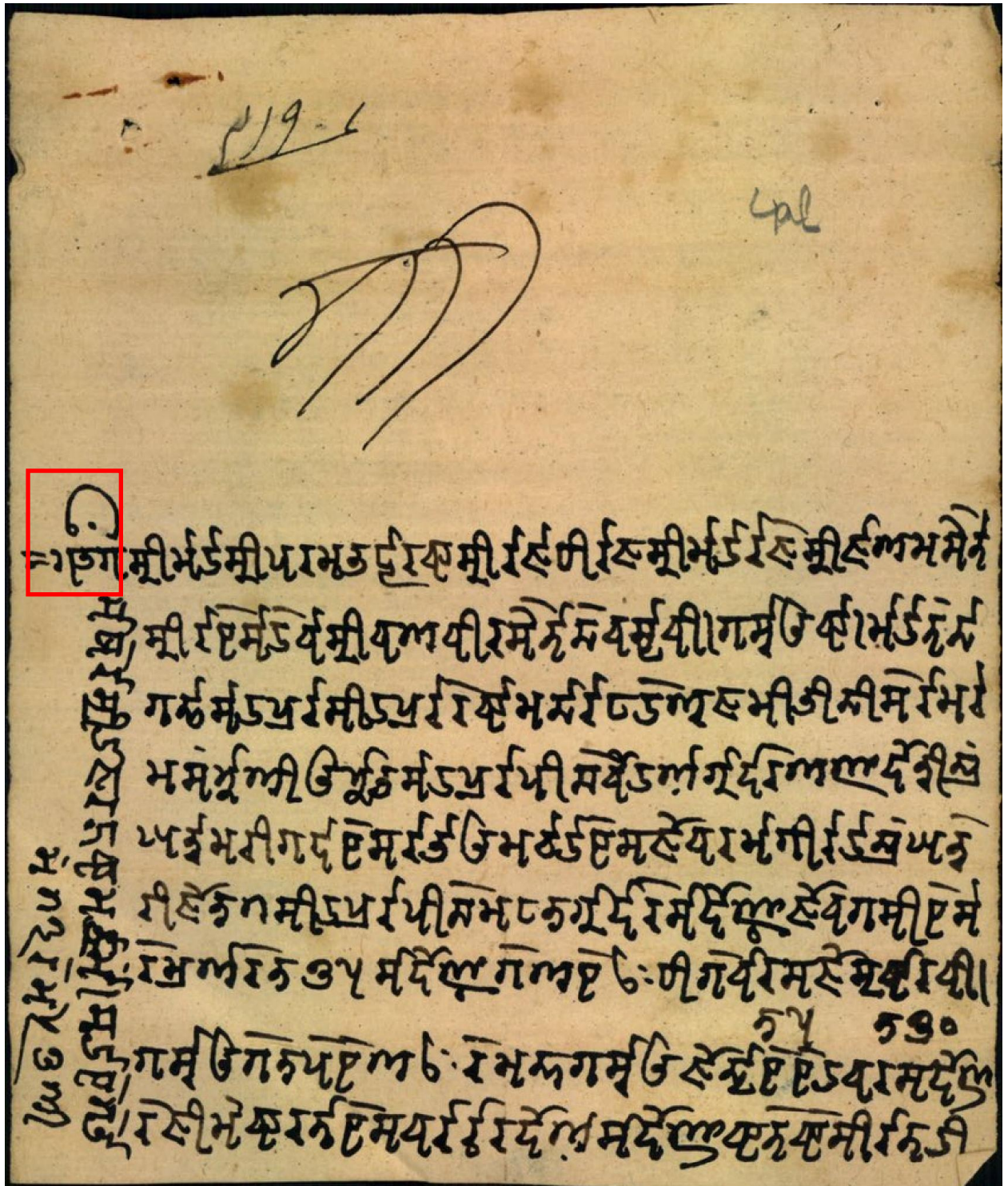


Figure 1. A document in Takri script issued by Raja Zalim Sen of Mandi State in year 1833 CE. The Candrabindu is attested in the beginning in the word Om (from [5]).



Figure 2. Use of Candrabindu in the letter Om. It also shows the inventory of Takri letters (from [1]).

II. Thakari of Mandi

ॐ नमो भगवते वासुदेवाय
ॐ नमो भगवते वासुदेवाय
ॐ नमो भगवते वासुदेवाय
ॐ नमो भगवते वासुदेवाय
ॐ नमो भगवते वासुदेवाय

Figure 3. Use of Candrabindu in the letter Om. It also shows the inventory of letters in Takri variety of Mandi region, Himachal Pradesh (from [1]).

TABLE 8 (a)
DEVĀŚEṢA - ṬĀKARĪ ALPHABET
(17th - 18th Centuries)

	I	II	III	IV	V	VI	VII	VIII	IX	X
Characters in Roman	Chamba Plate of Balabhadra V.S. 1667	Chamba Plate of Balabhadra V.S. 1692	Mindhal Plate of Pythvisintha V.S. 1698	Chamba Plate of Pythvisintha V.S. 1702	Divkhari Plate of Pythvisintha V.S. 1718	Lakṣmīnārāyaṇa Temple Plate of Śaṛuṣintha	Lakṣmīnārāyaṇa Temple Niche Inscription	Cobbold Stone Inscription	Treaty Between Rājāsīntha and Samsaracand	Modern Ṭākārī
a	अ अ	अ	अ अ	अ	अ	अ		अ	अ	अ
ā				अ						अ
i	इ	इ	इ	इ	इ	इ	इ		इ	इ
ī										इ
u	उ उ	उ उ	उ	उ	उ			उ	उ	उ
ū										उ
e	ए	ए	ए	ए	ए	ए	ए	ए	ए	ए
ai		ऐ			ऐ					ऐ
o	ओ	ओ	ओ	ओ		ओ				ओ
anu-nāsika	ँ	ँ	ँ	ँ	ँ	ँ				
k	क क	क क	क	क	क क	क	क	क क	क	क
kh	ख		ख	ख		ख			ख	ख
g	ग	ग	ग	ग	ग	ग	ग	ग	ग	ग
gh	घ	घ	घ		घ				घ	घ

Figure 4. Use of Candrabindu (it is referred as anunāsika here) in various Devāśeṣa Ṭākārī inscriptions. Most of these inscriptions are from Chamba region of Himachal Pradesh (from [2]).

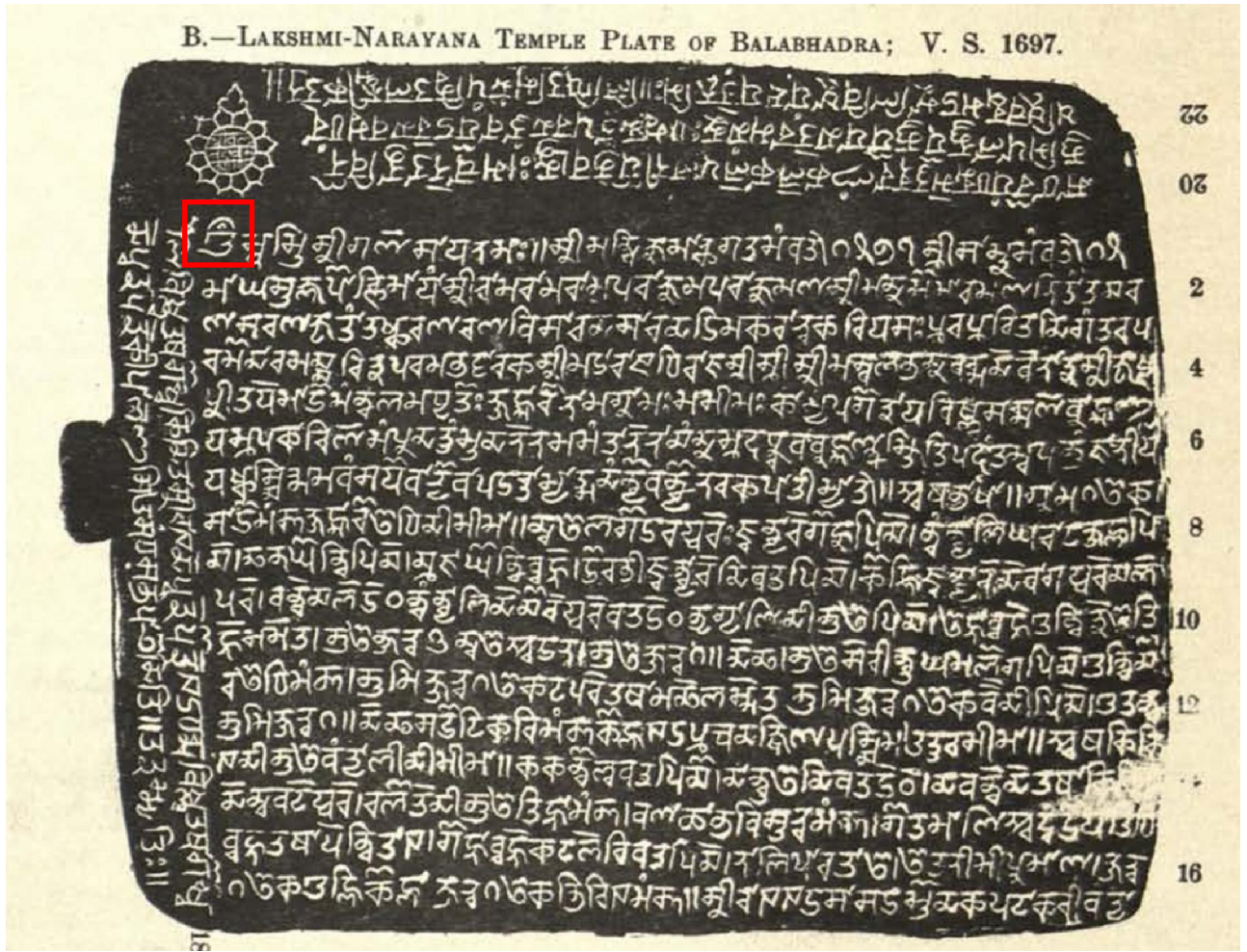


Figure 5. A copper plate inscription belonging to Lakshmi Narayana Temple, Chamba. The initial portion is in Sanskrit language and rest of the portion is in the regional Chambyali language. It is dated Vikrama Samvat 1697 which corresponds to 1641 CE. The Candrabindu is attested in the beginning in the word Om (from [3]).

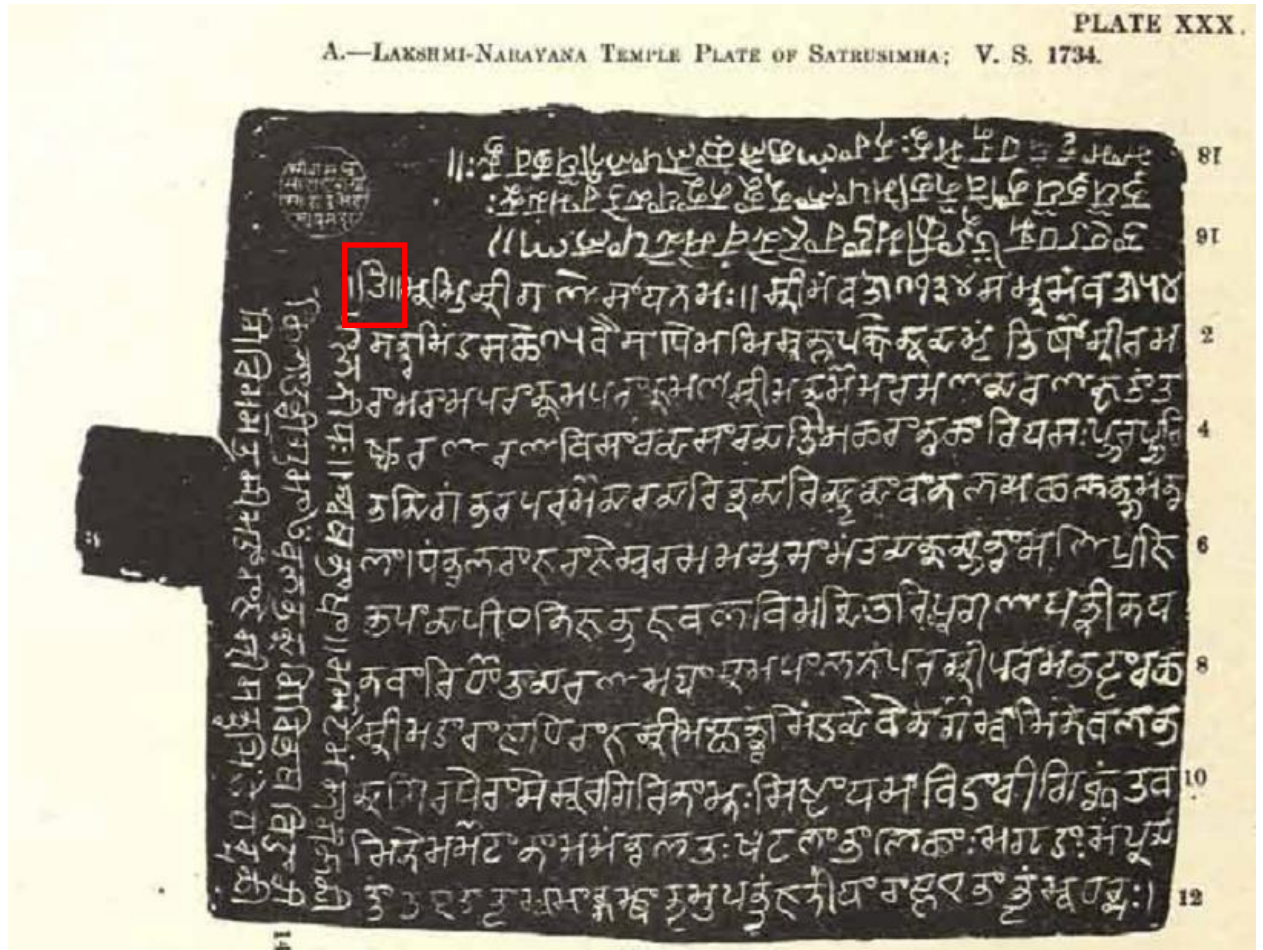


Figure 6. A copper plate inscription belonging to Lakshmi Narayana Temple, Chamba. The language is partly in Sanskrit and partly in regional Chambyali. It is dated Vikrama Samvat 1734 which corresponds to 1678 CE. The Candrabindu is attested in the beginning in the word Om (from [3]).

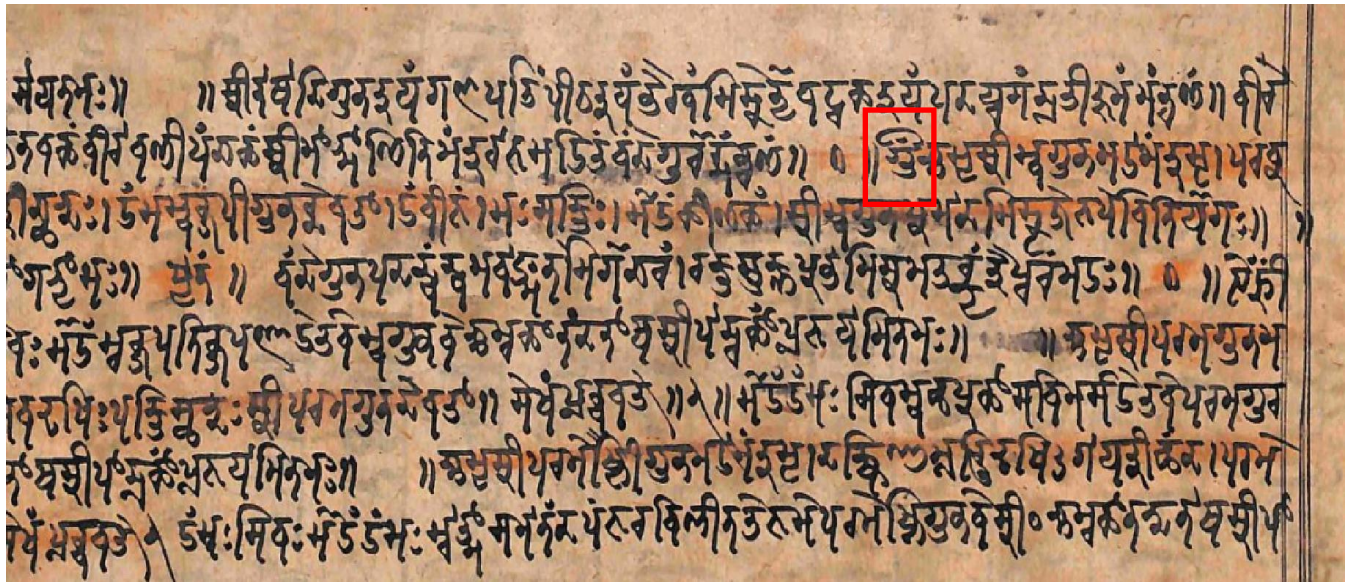


Figure 7. The Candrabindu is attested in the word Om. The way of writing Om is similar to way written in inscriptions. The language the manuscript is Sanskrit (from [4]).

ISO/IEC JTC 1/SC 2/WG 2

PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS

FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646¹

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from <http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html> for guidelines and details before filling this form.

Please ensure you are using the latest Form from <http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

See also <http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest *Roadmaps*.

A. Administrative

1. Title:	Proposal to encode the TAKRI SIGN CANDRABINDU
2. Requester's name:	Srinidhi A and Sridatta A
3. Requester type (Member body/Liaison/Individual contribution):	Individual Contribution
4. Submission date:	June 20, 2020
5. Requester's reference (if applicable):	
6. Choose one of the following:	
This is a complete proposal:	Yes
(or) More information will be provided later:	

B. Technical – General

1. Choose one of the following:	
a. This proposal is for a new script (set of characters):	
Proposed name of script:	
b. The proposal is for addition of character(s) to an existing block:	Yes
Name of the existing block:	Takri
2. Number of characters in proposal:	1
3. Proposed category (select one from below - see section 2.2 of P&P document):	

¹ Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

A-Contemporary	<input type="checkbox"/>	B.1-Specialized (small collection)	<input type="checkbox"/>	B.2-Specialized (large collection)	<input checked="" type="checkbox"/>
C-Major extinct	<input type="checkbox"/>	D-Attested extinct	<input type="checkbox"/>	E-Minor extinct	<input type="checkbox"/>
F-Archaic Hieroglyphic or Ideographic	<input type="checkbox"/>	G-Obscure or questionable usage symbols	<input type="checkbox"/>		<input type="checkbox"/>

4. Is a repertoire including character names provided? Yes

a. If YES, are the names in accordance with the “character naming guidelines”
in Annex L of P&P document? Yes

b. Are the character shapes attached in a legible form suitable for review? Yes

5. Fonts related:

a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?

Separate font is not necessary. Candrabindu of Noto Sans Sharada can be used.

b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

NA

6. References:

a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? Yes

b. Are published examples of use (such as samples from newspapers, magazines, or other sources)
of proposed characters attached? Yes

7. Special encoding issues:

Does the proposal address other aspects of character data processing (if applicable) such as input,
presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? Yes

Yes; see proposal for additional details.

8. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database (<http://www.unicode.org/reports/tr44/>) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?	No
If YES explain	
2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?	No
If YES, with whom?	
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	No
Reference:	
Takri script is not in active use. Information of User community is not available.	
4. The context of use for the proposed characters (type of use; common or rare)	common
Reference:	
See the text of proposal	
5. Are the proposed characters in current use by the user community?	No
If YES, where? Reference:	
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?	NA
If YES, is a rationale provided?	
If YES, reference:	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	NA
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	

10. Can any of the proposed character(s) be considered to be similar (in appearance or function)	
to, or could be confused with, an existing character?	Yes
If YES, is a rationale for its inclusion provided?	Yes
If YES, reference:	<i>The glyph is similar to Candrabindu of Sharada. See the text of proposal for reference</i>
11. Does the proposal include use of combining characters and/or use of composite sequences?	
If YES, is a rationale for such use provided?	Yes
If YES, reference:	<i>See the text of proposal</i>
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	NA
If YES, reference:	
12. Does the proposal contain characters with any special properties such as	
control function or similar semantics?	No
If YES, describe in detail (include attachment if necessary)	
13. Does the proposal contain any Ideographic compatibility characters?	
If YES, are the equivalent corresponding unified ideographic characters identified?	No
If YES, reference:	