

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://www.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://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

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

A. Administrative

1. Title:	Proposal for the Nepālalipi script in the UCS		
2. Requester's name:	Dev Dass Manandhar, Samir Karmacharya and Bishnu Chitrakar		
3. Requester type (Member body/Liaison/Individual contribution):	Individual contribution		
4. Submission date:	2012-02-05		
5. Requester's reference (if applicable):	Enclosed Annex-I Requester's reference		
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):	Yes		
Proposed name of script:	Nepaalalipi		
b. The proposal is for addition of character(s) to an existing block:	No		
Name of the existing block:			
2. Number of characters in proposal:	77		
3. Proposed category (select one from below - see section 2.2 of P&P document):			
A-Contemporary ☒	B.1-Specialized (small collection)	B.2-Specialized (large collection)	
C-Major extinct ☐	D-Attested extinct	E-Minor extinct	
F-Archaic Hieroglyphic or Ideographic ☐	G-Obscure or questionable usage symbols		
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?	Samir Karmacharya		
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):	Samir Karmacharya Kalimati, Kathmandu, Nepal ; saneer@gmail.com ; saneer@hotmail.co.uk		
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		
	Annex-II Rendering Nepaalalipi covers normative rules required for rendering the Nepaalalipi scrip.		

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.

¹ Form number: N3902-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)

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?	
If YES explain	No
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.)?	Yes
If YES, with whom?	Nepālabhāsā Academy, Tribhuvan University, Lumbini Buddhist University and Government of Nepal
If YES, available relevant documents:	Annex-VI List of included letters
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	Yes
Reference:	
4. The context of use for the proposed characters (type of use; common or rare)	Common
Reference:	Enclosed
5. Are the proposed characters in current use by the user community?	
If YES, where? Reference:	Worldwide
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?	Yes
If YES, is a rationale provided?	Yes
If YES, reference:	Enclosed
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	Yes
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 an existing character?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	Yes
If YES, is a rationale for such use provided?	Yes
If YES, reference:	Annex-II Rendering Nepaalalipi
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	No
If YES, reference:	
12. Does the proposal contain characters with any special properties such as control function or similar semantics?	Yes
If YES, describe in detail (include attachment if necessary)	Annex-II Rendering Nepaalalipi
13. Does the proposal contain any Ideographic compatibility characters?	No
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	

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Proposal for Nepālalipi script

This is a proposal to encode normalized Nepālalipi script in **Basic Multiple Plane of the ISO/IEC 10646**.

NOTE: Use of diacritical mark to roman alphabets are , ~ or for nasal sound and • for long sound.

1 Introduction. Nepālalipi has been used and developed by the Nepalese people for the last 1,000 years. “Nepāla-sambat”(Nepāl Erā), Nepālalipi (Nepalese Script), “Nepālabhāsā” and “Nepāla-sanskriti” are the country-related names gained during the past millennium of Nepalese history.

The script has various names - Prachalit (named by epigraphist Mr.Hemraj Shakya), Pachumola, Nepālaksara, and Nepālalipi. In his famous AD 1654 multi- script inscription, installed at the Royal palace courtyard in Kathmandu, King Pratāpa Malla called the script Newāraakhara (Foto-5). The earliest evidence of its emergence is dated to a manuscript copied in NS 28(A.D. 908) (Foto-3).

This script is derived from another script, inscribed on famous Lumbini Pillar in Nepāla(Foto-1), popularly known as Brāmhi script(originally cited as Dhamalipi by King Piyadasi, popularly known as Emperor Ashok, more than a dozen times in his inscriptions). Nepālalipi’s immediate ancestors were Liksabi period script (Foto-2). Nepālalipi has several identical characters with Liksabi, Kutila, Devanāgarī, Bengālī, Maithali and other scripts.

The script, presenting Nepalese Sanskriti (culture), associated with thousands of years of unexplored history within itself, is spread all over the world. The cultural importance of the script is enormous as we realize that more than 80 percent of over a million folios of manuscripts which are in Sanskrit, Maithali, Bengālī, Tibetan and Nepālabhāsā languages, all microfilmed by the Nepal-German Manuscript Preservation Project in 1971-2001, are written or copied in Nepālalipi.

The official boycott of this script began in 1912 when Rānā Prime Minister Chandra Shamshere issued an official notice which nullified all property ownership documents written in any language or script other than Gorkhālī language and Devanāgarī script. This administrative measure effectively put an end to the use of Nepālalipi as well as the Nepālabhāsā for nearly seventy years. In 1941, all writers and poets using the language were thrown in jail and their property confiscated.

1.1 User Community

Despite the political persecutions in the past two centuries and a half, the Human Development Index of the user community has been the highest one in Nepāla, with 71 percent literacy and 62 percent adult literacy as the national average. Out of the total number of graduates in 2001, 26 percent were Newā:s, and 30 percent of technical/professionals are from this community.

The total population of the Newā: as reported in the National Census 2001 a decade ago is 12,45,420. However, the Census Report also shows a decline of about 33 percent of the Nepālabhāsā (Newār) speakers. Seventy percent of the Newā:s live in urban settlements, and their income levels are at least 4 times higher than other average urban dwellers.

Nepal Telecommunications Authority (Issue 30th, Vol 78 15 april-14 May, 2011) has published data on the telephone subscribers in Nepal. The figure had crossed half of the country's population and expected to cross the country's population at the end of 2012. It is a growing practice to have Internet connection through telephone line.

1.2 Community Effort

In the past three decades, there have been vigorous organized efforts to teach and disseminate Nepālalipi. A few talented fontographers have also launched more than half a dozen true type fonts since early 1990s.

The monthly paper Lipipau on Nepālalipi script is in regular circulation. Nepāla Lipi Guthi has been publishing the yearly magazine **Pauvā:** for more than a decade. Online script tutorial from "The Newah" to write and learn about the script has been available for the past few years. The authors have provided transliteration software and fonts to **The Newah, Lipipau and Lūākha:**.

1.3 Requesters' steps towards UNICODE Consortium

1.3.1 The Begining

A transliteration software (developed under dB2K) **thanNahiti** launched in *CAN Infotec 2007* (event organized by Computer Association Of Nepal) enabled us to write **Nepālalipi and Ranjana**. Fonts provided along with the software were not designed to provide all the required clusters in **Nepālalipi and Ranjana**.

A new concept is developed to present each cluster as a combined multiple glyph. On the base of this concept, a new font **Ranjana Aakha.ttf** is created by the co-author Mr. Samir Karmacharya. **thanNahiti** software is rewritten and launched as **Ranjana Thahiti** in *CAN Infotec 2008*.

The software is rewritten to present **Nepālalipi** and launched as **Nepala Lipi Thahiti** in *CAN Infotec 2009* with a new font, Swati.ttf capable of presenting all possible clusters. At present, web sites and schools have adopted **Nepal Lipi Thahiti**, distributed under **Ranjana Thahiti** banner for **Nepālalipi** script.

1.3.2 Preparation for Universal Character Set (UCS)

The authors have managed three seminars for the inclusion of characters and their collation order in to UCS.

The first and second seminars were organized by The Department of Nepālabhasā, Trivubana University (2008, July 18th and Nov 8th). The seminars have provided the views on number of vowels and other characters to be included in UCS. Views on **vowel diacritics, vowel modifier diacritics, functional vowel modifier diacritics** and **collation order** were covered.

Nepāl Bhāsā Academy organized the third seminar on the decomposition of **multiple alphabet clusters** into phonetically equivalent alphabets and a cluster (see

Annex II Rendering Nepālalipi Script, *RR4- If a consonant or consonantal cluster precedes Bā-ākha:, then both are joined together to form a single cluster or extreme left alphabet is displayed with consonantal mark and other will form a new cluster.).*

1.3.3 Proposal exposed to the public for views and comments

From 2010 onward, partial documents were exposed to collect public views and comments on the proposal.

Prof. Tej Ratna Kansakar, Prof. Kamal Prakash Malla, Prof. Manika Lal Shrestha, Prof. Sundar Krishna Joshi, and epigraphists Mr. Shyam Sundar Rajabanshi, Mr. Raja Shakya, Mr. Sharad Kasa have openly participated in sharing the views on Nepālalipi UCS.

On August the 2nd 2010, the office of Kathmandu Metropolitan City was approached for their support on the finalization of the UCS Nepālalipi.

On May the 5th 2011, a complete set of a Nepālalipi UCS proposal document has been presented to the Honorable Prime Minister of Nepal, Mr. Jhulanath Khanal for governmental views and comments.

1.4 Allocation of Nepālalipi script

The proposed normalized characters are used daily by the user community all over the world. They are used for reading, writing, printing and publishing purposes. The script contains 77 characters with reserved positions which makes it 96 in total. Reserved positions are likely to be used by Nepalese Devanāgarī, Ranjanā, Bhujimola, Kutila, Liksabi and many more scripts based on the presented principles. Encoding of **Nepālalipi** script in the Universal Character Set UCS is strongly proposed to allocate into the **Basic Multiple Plane**.

1.5 Naming the characters in Nepālalipi script

Unique name is assigned to each character to be compatible with UNICODE Naming convention and to maintain international standard.

2 The Writing System

The **Nepālalipi** script is an alphasyllabic or abugida script type written from left to right and top to bottom. The writing alphabets are known as **Ākha**:

Example:2.1 कKA character is ākha:.

Alphabets may be written with added symbols all around it. The added symbols represent consonant, vowel, nasal, and time related sounds. They are known as **sa:chi** (Diacritic). They occur only with the alphabets.

Example:2.2 Alphabet कKA with diacritic - क̣ K, क̣̣KA(Ḳ̣), क̣̣̣KI, क̣̣̣̣KI(Ḳ̣̣̣),
क̣̣̣̣̣ KA:

Two or more alphabets are written as one single alphabet, stacking one on top of other known as **chinā-ākha**: (composed alphabet) and taken as a single entity.

Example:2.3 कKKA is a chinā-ākha:

Clusters are written vertically stacked one on top of the other in accordance to the alphabetic pronunciation.

Many manuscripts have symbol **Siddhi** at the beginning of manuscripts. Sometime **Om** symbol is used. Many do not have any symbol. Few alphabets have different looks. **Nepālalipi** script has its own numerical symbols.

Word breaks, line breaks, and hyphenation symbols are used in manuscripts, but not the same symbol all the time. Single or double vertical lines present a full stop mark. A mark within double lines may be used as a tag when a word or a symbol is inserted between them.

Example ||X|| where X represents a word, symbol or a vacant space.

3 Vowels- Mā-ākhā:

Six sounds are represented by six vowel alphabets and are known as **mā-ākhā**:. The six vowel alphabets are अA, आAA, इI, उU, एE, ओO. All six vowel characters are independent alphabets and each can be pronounced with a nasal sound.

Example :3.1 अA alphabet with a nasal sound अँ(ã)

Each vowel alphabet may be marked with a time duration pronunciation.

Example :3.2 अA alphabet with a long sound अःA:.

Each vowel alphabet may be marked with a nasal and time duration pronunciation.

Example :3.3 अA alphabet with a nasal and long sound अँः(Kã:) .

Diagraph [°] अइ is presented by a monograph [°] .

Example :3.4 अइ diagraph is presented by a monograph अँःA:.

Vowels आAA, इI, उU, एE, ओO, cannot be written as separate characters, but their representative marks are used.

Followings are the vowel representative marks.

आAA vowel, the representative mark is -T or ।.

इI vowel, the representative mark is - ।.

उU vowel, the representative mark is - ॡ or ॢ .

एE vowel, the representative mark is - ॣ or (.

ओO vowel, the representative mark is - ॥ or (।.

Either direct अA is written or no mark is written in the case of vowel अA.

Alphabets without a vowel mark, are understood to be pronounced with a अA vowel sound अA.

3.1 Diphthongs in Nepālalipi

Two diphthongs and their respective marks are commonly used within the script.

They are अइAI and औAU. They are the representative of vowel अA,इI and अA,उU.

अइAI diphthong is represented by the mark ॢ or (.

औAU diphthong is represented by the mark ॣ or (। .

4 Bā-ākha:

Bā-ākha: is a single alphabet pronounced with a short vowel अA. Fourty five phonemes are pronounced with the final vowel अA, known as **bā-ākha:**. This includes two semivowels and seven allographs.

Ākha:(alphabets) pronounced with vowel अA are grouped into three different categories.

4.1 Classification of bā-ākha:.

4.1.1 Ākha:(alphabets) with vowel अA

4.1.2 Allograph (ākha:) with vowel अA

4.1.3 Semivowel alphabets(ākha:) with vowel अA

4.1.1 Alphabets with vowel अA

The Bā-ākha: has the following characters presented in Table 1.

Table 1: Bā-ākha:

क KA	ख KHA	ग GA	घ GHA	ङ NGA	ङा NGHA
च CA	छ CHA	ज JA	झ JHA	ञ NJA	ञा NJHA
ट TA	थ THA	ड DA	ढ DHA	न NA	ना NHA
प PA	फ PHA	ब BA	भ BHA	म MA	मा MHA
र RA	र्रा RHA	ल LA	ल्ला NHA	स SA	ह HA

4.1.2 Allograph Bā-ākha: with vowel अA

Table 2 : Alphabet and their allograph

Seven allograph alphabets are the followings:			
Alphabet	–	ट TA	allograph ट TTA
Alphabet	–	थ THA	allograph ठ TTHA
Alphabet	–	ड D	allograph ढ DDA
Alphabet	–	ध DHA	allograph ढ DDHA
Alphabet	–	न NA	allograph ण NNA
Alphabet	–	स SA	allograph श SHA
Alphabet	–	स SA	allograph ष SSA

Note: Few centuries ago, alphabet र RA was considered as an allograph to the alphabet ल LA Gualberto and Cappuccino(1792).

4.1.3 Semivowels with vowel अA

Two semivowels य YA(EA) and व VA(OA) are used as single alphabets . Both the alphabets य YA(EA) and व VA(OA) ends with a vowel sound अA and are included in bā-ākha: group.

4.2 Lower-letter as bā-ākha:

The lower alphabets are placed at the bottom of a cluster. Alphabets bā-ākha:s within clusters, are listed below as Lower-letter bā-ākha:.

Table 3 : Extraction of lower alphabets from clusters

का KA	खा KHA	गा GA	घा GHA	ङा NGA
चा CA	छा CHHA	जा JA	झा JHA	ञा NJA
टा TA, ट्टा	था THA, ट्ठा	डा DA, ड्डा	धा DHA, ड्धहा	ना NA, ण्णना
पा PA	फा PHA	बा BA	वा VA	मा MA
या YA	रा RA	ला LA	वा WA	सा SA, शशा, षषा
हा HA				

Note: Allographs are placed in the same cells along with their corresponding alphabet.

Some bā-ākha: have different shapes when placed at the bottom.

They are ण्णना, टा, था alphabets.

Table 3-a : Lower-letter as bā-ākha: with different shape

Alphabet bā-ākha:	Lower-letter as bā-ākha: with different shape
ण्णना	क्कण्णना, ण्णना
टा	क्कटा, टा
था	क्कथा, था
बा	क्कबा, क्कुबा (BHA changes its lower shape when U vowel diacritic mark is added to its cluster.)

Lower-alphabets ङङा, ञञा, ण्णना, ररा, लला, ममा are not in use as lower bā-ākha:. The lower letters are not written alone. They exist only within a cluster.

4.3 Classification of bā-ākha: by its mola property.

Nepālalipi script is recognized by its horizontal head stroke property. It is known as **Mola**. The head stroke may be replaced by a curly mark as per the application of a particular diacritic mark. But seven of the alphabets are devoid of the head stroke entirely. Therefore, Nepālalipi can be categorized by existence of its

horizontal head stroke known as a **mola-du** and non-existence of its horizontal head stroke known as a **mola-madu**.

Seven alphabets ગGA, જNJ, ટTHA, ઠTTTHA , ઢDHA, ણNNA and શSHA are recognized under mola-madu category and the remaining thirty eight alphabets are mola-du type.

5 Diacritic

Five types of diacritical marks are in use with Nepālīlīpi. They are the following:

- 5.1-Consonantal diacritic
- 5.2- Vowel diacritic
- 5.3- Vowel modifier diacritic;
- 5.4- Functional vowel modifier diacritic
- 5.5-Syllabic diacritic

Diacritic mark is an integral part of an alphabet. They have definite functions. Vowels and bā-ākha:s are converted into ākha: by the addition of a diacritical mark.

5.1-Consonantal diacritical mark(ळ) defines the character as a consonant. It is placed at the bottom of a character without touching it.

Example : 5.1-Consonantal diacritic

Alphabet	Consonant
क	क़

5.2- Vowel diacritical mark(ढ, ढ, ढ, ढ, ढ) is applicable to bā-ākha:s only. It may be placed all around a bā-ākha:.

Example : 5. 2- Vowel Diacritical Mark

Alphabet	Alphabet with Vowel Diacritic
	Right - Left - Bottom - Top - Top_right
क KA	का KAA- कि KI- कु KU - के KE - को KO

5.2.1- Vowel diacritical mark changes its appearances depending on the shape of a bā-ākha: alphabet.

Vowels AA, E and O ,have different diacritics for Mola-madu type of alphabets.

Vowel U have different diacritic mark for alphabets गGA, तTA, बBHA and शSHA known as GA, TA, BHA, SHA group..

Vowel U have different diacritic mark for alphabet RA.

Alphabet BHA changes its shape for Vowel U.

Example : 5. 2.1- Change of Shape of Vowel Diacritical Mark

Alphabet Type	AA	I	U	E	O
Mola-du alphabet घGHA	घाGHAA	घिGHI	घूGHU	घेGHE	घोGHO
Mola-madu alphabet धDHA	धाDHAA	धिDHI	धूDHU	धेDHE	धोDHO
GATABHASHA, Alphabet group त TA			तु TU		
Alphabet न RA			रु RU		

Example : 5. 2.2- Change of Shape of an alphabet BHA by presence of U Vowel Diacritical Mark.

Alphabet	Alphabet with Vowel U Diacritic
भ BHA	भू BHU

5.3- Vowel modifier diacritical mark(¨ a nasal sound mark) is placed at the top of the character. This mark is applicable to all forty five characters.

Example : 5.3- Vowel modifier diacritical mark

Alphabet	With Vowel Modifier
Vowel A अ	अँ आँ
Bā-ākha: क	कँ KĀ

5.4- Functional vowel modifier diacritical mark (॥ a long sound mark) is placed at the end of a character. This mark is applicable to all forty five characters. It has a capacity to change I, U vowel marks and vowel modifier. In general it turns a diagraph into a monograph or tri-graph into a diagraph.

Example : 5.4.1 - Functional vowel modifier diacritical mark(FVM)

Alphabet	With FVM
अ	अ॥
क	क॥

Alphabet	Alphabet with a Vowel Modifier	with FVM ୠ	Monograph Change in Vowel modifier Mark
अ A	अँ A	अँॠ Aँ:	अँ Aँ:
क KA	कँ KÁ	कँॠ KÁ:	कँ KÁ
Alphabet	Alphabet with a Vowel Mark	with FVM ୠ	Monograph Change in Vowel Mark
क KA	कि KI	किॠ KI:	की KI:
क KA	कु KU	कुॠ KU:	कू KU:
Alphabet	Alphabet with a Vowel Mark and a vowel modifier	with FVM ୠ a tri-graph	Diagraph Change in Vowel modifier mark In presence of a vowel mark
क KA	कूँ KÚ	कूँॠ KÚ:	कूँ KÚ:

Functional property of FVM

5.5-Syllabic diacritical mark(ୠ) is used to represent a syllable RRI. This mark is placed at the bottom of a bā-ākha:. The character turns into an equivalent cluster of KRA alphabet with a I vowel mark.

Example 5 - Syllabic diacritical mark

Alphabet	With Syllabic Mark	Approximately Equivalent Presentation
क KA	कू KRR	क्रि KRI

All diacritical marks are presented by combining characters in UCS.

6 Consonants

Consonant is an ākha: with a consonantal mark at its bottom. It is a growing practice to add a diacritic consonantal mark at the bottom of an alphabet and pronounced as a grapheme and distinguished as a consonant.

Bā-ākha: is converted into a grapheme by the addition of consonantal mark

“ ॡ ” Bānwasa:chī: (consonantal mark) at the bottom.

Application of consonantal mark “ ॡ ” changes bā-ākha: into a consonant except the semi vowels.

In Nepālabhāsā, character य्(Y) is used as a vowel “ ए(E) ”.

In Nepālabhāsā, character व्(W) is not in use.

Table number 4 presents the consonants.

Table 4 : List of consonants

क _K	ख _{KH}	ग _G	घ _{GH}	ङ _{NG}	ङ् _{NGH}
च _C	छ _{CH}	ज _J	झ _{JH}	ञ _{NJ}	ञ् _{NJH}
ट _T	थ _{TH}	ड _D	ध _{DH}	न _N	न् _{NH}
प _P	फ _{PH}	ब _B	भ _{BH}	म _M	म् _{MH}
र _R	र्र _{RH}	ल _L	ल् _{LH}	स _S	स् _H

Table 5 : List of allograph consonants

Allograph consonants are the followings : ट्_{TT}-ट्_{TTH}-ड्_{DD}-ड्_{DDh}-ढ_{NN}, श_{SH} and ष_S.

There are a total of thirty seven consonants.

The consonants are derived from UCS listed characters, therefore, are not listed in the UCS character chart.

6.1 An upper-letter as a consonant.

The upper-letters in clusters are consonants and do not exist independently.

Table 6 : List of upper-letters in clusters

क K	,ख KH	ग G	घ GH	ङ NG	ङि NGH
च C	,छ CH	ज J	झ JH	ञ NJ	ञि NJH
त T, ट TT	थ TH, ठ TTH	ड D, ड़ DD	ध DH, ढ़ DDH	न N, ण NN	णि NH
प P	फ PH	ब B	भ BH	म M	म् MH
र R	रि RH	ल L	ल् H	स S, श SH, ष SS	ह H

NOTE: The allograph is placed along with its alphabet in the same cell.

Some consonants have different shapes when used as an upper alphabet in a cluster.

They are त T, ट T and भ BH.

6.2 Lower-letter as a consonant.

The lower alphabets are placed at the bottom of a cluster. Alphabets are written either with a diacritic or as **Bā-ākha**: within a cluster. To convert lower alphabet into a consonant, a consonantal mark ् is added at the bottom of a cluster.

They are listed below as consonants:

Table 7 : List of lower-letters as consonant in a cluster.

क K	ख KH	ग G	घ GH	ङ NG
च C	छ CHH	ज J	झ JH	ञ NJ
त T, ट TT	थ TH, ठ TTH	ड D, ड़ DD	ध DH, ढ़ DDH	न N, ण NN
प P	फ PH	ब B	भ BH	म M
र R	ल L	स S, श SH, ष SS	ह H	

Note: Allograph are placed in a same cell.

Alphabets ण NN, त T, ठ TH have different shapes when used as lower-alphabet of a cluster. The upper and lower letters are not written alone. They exist only with a cluster.

7 Vowel Diacritic

Marks ്, ്, ്, ്, ് are the diacritical marks of vowels ്AA, ് I, ്U, ്E and ്O respectively as mentioned before. Vowel diacritical marks are applicable only to bā-ākha:. Only one vowel diacritic mark is applicable at a time. Different diacritical marks are used for vowel ്AA, ്E and ്O depending upon the mola character of a bā-ākha:

Vowel diacritic mark application to mola-du and mola-madu alphabets.

Vowel ്AA diacritic mark for mola-du Bā-ākha: is ് and mola-madu is ്

Vowel ്E diacritic mark for mola-du Bā-ākha: is ് and mola-madu is (

Vowel ്O diacritic mark for mola-du Bā-ākha: is ് and mola-madu is (

Application of ്U vowel diacritic mark is divided into two groups.

One is ്GA, ്TA, ്BHA and ്SHA and the others are the remaining bā-ākha:s.

For example CA ് and diacritic mark of vowel ്U is ് CU , whereas application of ്U vowel diacritic mark ് is applied to ്GA, ്TA, ്BHA and ്SHA Bā-ākha:. The result is ്GU, ്TU, ്BHU, and ്SHU respectively.

Vowel ്U is added to the right side of the alphabet ്RA, ്RU.

Examples:

Table 9 : Application of vowel diacritic mark to Bā-ākha:.

Vowels	Diacritic Mark	Bā-ākha:	Mola-du bā-ākha: with a Vowel diacritic mark.	Mola-madu bā-ākha: with a Vowel diacritic mark.
്A	None	ക KA, ഴ GA	ക KA and ്A is ക KA	ഗ GA and ്A is ഗ GA
്AA	്, ്	ക KA, ഴ GA	ക KA and ്AA is കാ KAA	ഗ GA and ്AA is ഗാ GAA
് I	്	ഖ KHA, ഴ TTHA	ഖ KHA and ്I is ഴ KHI	ഴ TTHA and ്I is ഴ TTHI
്E	്, (	ഠ NGE, ് THA	ഠ NGE and ്E is ഠ NGE	് THA and ്E is (് THE
്O	്, (്	ച CHA, ഴ NJA	ച CHA and ്O is ചാ CO	് NJA and ്O is (് NJO

Table 10 : Application of ്U vowel diacritic mark to Bā-ākha:.

Vowel	Diacritic	Bā-ākha:	Group GA, TA, BHA and SHA	RA
്U	്, ്, ്	ക KU, ഴ KHU	് KU, ് TU, ് BHU and ് SHU	് RU

NOTE: When vowel diacritic mark is applied on BHA, the original appearance ഴ BHA is changed into ് BHA.

7.1 རྟེ Vowel Diacritic with a semivowel རྟེYA(EA)

When རྟེ vowel diacritic mark is applied to a semivowel རྟེYA(EA), the semivowel will turn into རྟེYE(EE)". Diphthong EE is not in use but རྟེ is in use as an equivalent to the vowel རྟེE.

A semivowel རྟེYA(EA) when རྟེ U vowel diacritic mark is applied, will turn into རྟེYU(EU).

7.2 རྟེO Vowel Diacritic with a semivowel རྟེ WA(OA)

When རྟེO vowel diacritic mark is applied, a semivowel རྟེWA(OA) will turn into རྟེWO(OO). Diphthong OO is not in use but རྟེ is some times used in place of the vowel རྟེO.

7.3 Diphthong Diacritical Marks with a vowel རྟེA.

As mentioned above, two diphthongs are generally used. Both the diphthongs have རྟེA vowel at the beginning of their pronunciation. རྟེA vowel mark is not presented independently. Therefore diacritical mark for diphthongs with a vowel རྟེA, require an independent mark as well as independent code of presentation, which is done in the UCS listing. The diphthongs རྟེAI and རྟེAU have their equivalent diacritical marks རྟེ and རྟེ respectively.

རྟེAI and རྟེAU are derived from their respective characters, therefore are not included in the character chart.

Example : Application of **diphthong** diacritical mark to bā-ākha:.

Table 11 : Application of diphthong vowel diacritic mark to Bā-ākha:.

Diphthong	Diacritic	Bā-ākha:	Mola-du bā-ākha: with a diphthong diacritic mark.	Mola-madu bā-ākha: with a diphthong diacritic mark.
རྟེAI	རྟེ, རྟེ	ཀKA, མSHA	ཀKA and རྟེAI is ཀྲKAI	མSHA and རྟེAI is མྲSHAI
རྟེAU	རྟེ, རྟེ	ཅCHA, ཐTTHA	ཅCHA and རྟེAU is ཅྲCHAU	ཐTTHA and རྟེAU is ཐྲTHAU

8- Modifier

8.1— A Vowel Modifier Diacritic- A Nasal Sound Mark

Nasal sound diacritical mark is a vowel modifier and applicable only after a vowel diacritical mark. Single alphabet may have a single word and may be a different word with a diacritical mark.

क, ि, ँ Is the application sequence for KI with a nasal sound किं .

Nasal sound diacritical mark ँ is named Milāfuti

Application of nasal sound diacritical mark to vowel and diphthongs.

Table 12 : Application of nasal sound diacritical mark to vowel and diphthongs.

अA	आAA	इI	उU	एE	ओO	ऐAI	औAU
अँ	आँ	इँ	उँ	एँ	ओँ	ऐँ	औँ
कँKAँ	कँKAAँ	किँKIँ	कुँKUँ	केँKEँ	कोँKOँ	कैँKAँ	कौँKAँ

Note : Vowels with a nasal sound are presented by

A(Ā), AA(AĀ), Ī(Ī), Ū(Ū), Ē(Ē), Ō(Ō), Āi (Āi) and Āu(Āu).

8.2- A Functional Vowel Modifier Diacritic- A Long Sound mark

Long sound Diacritic mark “ॡ” is named “LIPHUTI”

Vowel अ A with long sound diacritic “ॡ LONG SOUND” is अॡ

Vowel आAA with long sound diacritic “ॡ LONG SOUND” is आॡ

Vowel इI with long sound diacritic “ॡ LONG SOUND” is इॡ (इॡ ॡ)

Vowel उU with long sound diacritic “ॡ LONG SOUND” is उॡ (उॡ ॡ)

Long sound mark is not in use. However, it is not prohibited with vowel E and O .

Vowel एE with long sound diacritic “ॡ LONG SOUND” is एॡ

Vowel ओO with long sound diacritic “ॡ LONG SOUND” is ओॡ

8.3 Vowels with Nasal sound and Long Sound Diacritical Mark

Long sound vowel modifier has the functional capacity to change **nasal sound** and the **long sound** into a **long nasal sound**.

Vowel अ A with long and nasal sound diacritical marks ँ is अँ. Diagram of long and nasal sound mark is

resented by a monograph diacritic ˆ.

The monograph Long Nasal Sound mark is known as **sinha:phuti**.

Table 13 : Replacement of nasal and long sound diagraph by a **long nasal sound** monograph .

Vowel अ A	Nasal Sound Mark with Vowel ँ, अँ	Long Sound Mark with Vowel ः, अः	Long Nasal Sound Mark अँः, अँँ
Vowel आ AA	ँ, आँ	ः, आः	आँः, आँँ
Vowel इ I	ँ, इँ	ः, इः	इँः, इँँ
Vowel उ U	ँ, उँ	ः, उः	उँः, उँँ
Vowel ए E	ँ, एँ	ः, एः	एँः, एँँ
Vowel ओ O	ँ, ओँ	ः, ओः	ओँः, ओँँ

Vowel mark, nasal sound and a long sound is functionally presented by a long nasal sound mark.

Table 14 : Bā-ākha: with nasal and long sound diagraph and with a **long nasal sound** monograph .

Bā-ākha	Bā-ākha with a nasal and a long sound diagraph mark	Bā-ākha with a long nasal sound monograph mark
क KA	कँः KĀ:	कँँ KĀ:
त TA	तँः TĀ:	तँँ TĀ:
न NA	नँः NĀ:	नँँ NĀ:

9 Six new alphabets from NEPĀLABHĀSĀ.

Six alphabets NGHA ङ़ा , NJHA ञ़ा , NHA ण़ा , MHA म़ा , RHA ऱा and LHA ल़ा are new to Dhamalipi and related scripts. All six alphabets are written differently to differentiate from a cluster.

9.1 NHA ण़ा, MHA म़ा and LHA ल़ा alphabets

NEPĀLABHĀSĀ is a monosyllabic language. Each alphabet with a vowel, forms a word. These alphabets combine with semi vowels **YA**, **WA** and vowel diacritics to form a new alphabet.

Three consonants NH, MH, LH are widely used and are shown bellow.

Table 15 : Three added bā-ākha:s as upper consonant and with **AA** and **U** vowel diacritical marks.

Bā-ākha:	Consonant as an upper letter of a cluster	YA	YAA	YU	WA	WAA
NHA ण़ा	NH ण़	NHYA ण़ा	NHYAA ण़ा	NHYU ण़ा	NHWA ण़ा	NHWAA ण़ा
MHA म़ा	MH म़	MHYA म़ा	MHYAA म़ा	MHYU म़ा	MHWA म़ा	MHWAA म़ा
LHA ल़ा	LH ल़	LHYA ल़ा	LHYAA ल़ा	LHU ल़ा	LHWA ल़ा	LHWAA ल़ा

10 Collation order. The order sequence of NEPAALALIPI(NEPĀLALIPI) is presented in the character set in accordance with UCS.

Vowels alphabets are always the starting characters in Nepālaliipi. They are followed by Bā-ākha: and then by clusters. The characters are placed to tally with the traditional collation order.

It is worth mentioning that the diphthongs are placed in between vowels. ॐAI and ॐIAU as marks are presented in collation order after ॐI and after ॐU vowels respectively. It is already mentioned why the marks should have separate codes. The diphthong ॐAI is pronounced either as two syllables like ॐA, ॐI or as a single syllable ॐAI.

For example KAI is pronounced and written as कKA, ॐI and कॐKAI. Being equivalent words, both the words are kept close to each other. Therefore the diphthong mark is placed after the ॐI. vowel. Same is the case with ॐIAU diphthong, which is placed after the ॐU vowel.

As mentioned above, there are seven allographs in Nepālaliipi. Each corresponding allograph is placed after the main alphabet.

For example Character ट TTA is an allograph of the character ट TA. Therefore the character ट TA is placed first then the allograph टTTA follows.

The sequence of non-nasal sound alphabets are placed first and then the nasal sound follows. To fulfill the requirement, long sound mark is placed before the nasal sound mark.

Collation Order Examples:

Example: कKA, कॐKA:, कॐKĀ, कॐKĀ:

Example: कॐKAA, कॐॐKAA:, कॐॐKĀĀ, कॐॐKĀĀ:

It is a tradition to write bā-ākha: at first and its cluster afterward. Therefore the consonantal mark is placed after the vowel, nasal and long sound mark.

Example:

कKA, कॐKAI, कॐKAI, कउ, कॐKAU, कॐKAA, किKI, कुKU, केKE, कोKO, कॐKA:, कॐKĀ, कॐKKA

Syllabic alphabet ऋRRI has its own syllabic mark presentation. It is placed separately at the end. Any alphabet written with RI makes the alphabet a consonant.

Example

क KA is applied with a syllabic diacritic mark ॠRRI will result in कॠKRRI, where K is a consonant.

11 Combining Characters. Diacritic marks representing vowels, vowel modifier, functional modifier and a syllabic mark, are presented by Combining Characters in UCS. They are eleven in number.

Example: ॐAA vowel markT is presented by the Combining Character ॐ.

The Combining Character ॐ, ॐ, ॐ, ॐ, ॐ represents vowel diacritical mark.

The Combining Character ॐ, ॐ represents diphthong diacritical mark.

The Combining Character ॐ represents vowel Modifier diacritical mark.

The Combining Character ॐ represents long sound Modifier diacritical mark.

The Combining Character ॐ represents consonantal diacritical mark.

The Combining Character ॐ represents RRI syllabic diacritical mark.

Their uses are presented in Annex-II Rendering Nepaalalipi Script.

12 UNIVERSAL CHARACTER SET Table XX00 – Row XX5F: NEPAALALIPI

	XX0	XX1	XX2	XX3	XX4	XX5
0	अ XX00	ऊ XX10	रु XX20	ँ XX30	। XX40	० XX50
1	आ XX01	म XX11	व XX21	ा XX31	॥ XX41	१ XX51
2	ॐ XX02	ॐ XX12	र XX22	ि XX32	॥ॐ॥ XX42	२ XX52
3	ै XX03	ऊ XX13	म XX23	् XX33		३ XX53
4	उ XX04	ग XX14	क XX24	ँ XX34		४ XX54
5	ौ XX05	ट XX15	य XX25	ी XX35		५ XX55
6	च XX06	थ XX16	न XX26	् XX36		६ XX56
7	अ XX07	० XX17	क XX27	ृ XX37		७ XX57
8	क XX08	द XX18	ल XX28	मृ XX38		८ XX58
9	ख XX09	उ XX19	ल XX29	मृ XX39		९ XX59
A	ग XX0A	ध XX1A	व XX2A	७ XX3A		
B	घ XX0B	ट XX1B	स XX2B	२ XX3B		
C	ढ XX0C	न XX1C	ष XX2C	ँ XX3C		
D	ऊ XX0D	ध XX1D	ष XX2D	१ XX3D		
E	व XX0E	ऊ XX1E	रु XX2E	ॐ XX3E		
F	ऊ XX0F	य XX1F	०१ XX2F	ॐ XX3F		

13- Code Chart Details of NEPAALALIPi

Code Point	Character	Character Name Vowel Letters
XX00	अ	NEPAALALIPi LETTER A
XX01	आ	NEPAALALIPi LETTER AA
XX02	इ	NEPAALALIPi LETTER I

Vowel Diacritic

XX03	ई	NEPAALALIPi MARK AI
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Vowel Letter

XX04	उ	NEPAALALIPi LETTER U
------	---	----------------------

Vowel Diacritic

XX05	ऊ	NEPAALALIPi VOWEL MARK AU
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Vowel Letters

XX06	ए	NEPAALALIPi LETTER E
XX07	ओ	NEPAALALIPi LETTER O

Bā-ākha Letters

XX08	क	NEPAALALIPi LETTER KA
XX09	ख	NEPAALALIPi LETTER KHA
XX0A	ग	NEPAALALIPi LETTER GA
XX0B	घ	NEPAALALIPi LETTER GHA
XX0C	ङ	NEPAALALIPi LETTER NGA
XX0D	झ	NEPAALALIPi LETTER NGHHA
XX0E	च	NEPAALALIPi LETTER CA
XX0F	छ	NEPAALALIPi LETTER CHA
XX10	ज	NEPAALALIPi LETTER JA
XX11	झ	NEPAALALIPi LETTER JHA
XX12	ञ	NEPAALALIPi LETTER NJA
XX13	झ	NEPAALALIPi LETTER NJHA
XX14	ट	NEPAALALIPi LETTER TA
XX15	ठ	NEPAALALIPi LETTER TTA
XX16	थ	NEPAALALIPi LETTER THA
XX17	ड	NEPAALALIPi LETTER TTHA

XX18	द	NEPAALALIPi LETTER DA
XX19	ड	NEPAALALIPi LETTER DDA
XX1A	ध	NEPAALALIPi LETTER DHA
XX1B	ढ	NEPAALALIPi LETTER DDHA
XX1C	न	NEPAALALIPi LETTER NA
XX1D	ण	NEPAALALIPi LETTER NNA
XX1E	ङ	NEPAALALIPi LETTER NHA
XX1F	प	NEPAALALIPi LETTER PA
XX20	फ	NEPAALALIPi LETTER PHA
XX21	ब	NEPAALALIPi LETTER BA
XX22	भ	NEPAALALIPi LETTER BHA
XX23	म	NEPAALALIPi LETTER MA
XX24	य	NEPAALALIPi LETTER MHA
XX25	र	NEPAALALIPi LETTER YA
XX26	ल	NEPAALALIPi LETTER RA
XX27	ळ	NEPAALALIPi LETTER RHA
XX28	व	NEPAALALIPi LETTER LA

XX29	ल्ह	NEPAALALIPi LETTER LHA
XX2A	व	NEPAALALIPi LETTER WA
XX2B	स	NEPAALALIPi LETTER SA
XX2C	श	NEPAALALIPi LETTER SHA
XX2D	ष	NEPAALALIPi LETTER SSA
XX2E	ह	NEPAALALIPi LETTER HA

Functional Vowel Modifier

XX2F	ॠ	NEPAALALIPi LONG SOUND MARK LIPHUTI
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Vowel Modifier

XX30	ँ	NEPAALALIPi NASAL SOUND MARK MILAPHUTI
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Vowel Diacritical Marks

XX31	ा	NEPAALALIPi VOWEL MARK AA
XX32	ि	NEPAALALIPi VOWEL MARK I
XX33	ु	NEPAALALIPi VOWEL MARK U
XX34	े	NEPAALALIPi VOWEL MARK E
XX35	ो	NEPAALALIPi VOWEL MARK O

Consonantal Mark

XX36		NEPAALALIPi CONSONANTAL MARK
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Syllabic Mark

XX37		NEPAALALIPi SYLLABIC MARK RRI
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Syllable Letters

XX38		NEPAALALIPi SYLLABIC LETTER RRI
XX39		NEPAALALIPi SYLLABIC LETTER RRII
XX3A		NEPAALALIPi SYLLABIC LETTER LRRI
XX3B		NEPAALALIPi SYLLABIC LETTER LRRII

Starting Symbol

XX3C		NEPAALALIPi SIGN OM
XX3D		NEPAALALIPi SIGN SIDDHA

Word Break Symbol

XX3E		NEPAALALIPi SIGN KHAGWA SWAPU
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Different Signs

XX3F		NEPAALALIPi SIGN
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Full Stop Marks

XX40		NEPAALALIPI SIGN DIPU
XX41		NEPAALALIPI SIGN DOUBLE DIPU
XX42	❀	NEPAALALIPI SIGN FLOWER

NOTE: XX42 NEPAALALIPI SIGN FLOWER for end of topic.

Numerals

Code Point	Character	Character Name
XX50	०	NEPAALALIPI DIGIT 0
XX51	१	NEPAALALIPI DIGIT 1
XX52	२	NEPAALALIPI DIGIT 2
XX53	३	NEPAALALIPI DIGIT 3
XX54	४	NEPAALALIPI DIGIT 4
XX55	५	NEPAALALIPI DIGIT 5
XX56	६	NEPAALALIPI DIGIT 6
XX57	७	NEPAALALIPI DIGIT 7
XX58	८	NEPAALALIPI DIGIT 8
XX59	९	NEPAALALIPI DIGIT 9

Code from XX43 to XX4F and XX5A to XX5F are vacant spaces for future use.

14 Cluster (Chinā-ākha:)

Chinā-ākha: (Sequential stacking of one alphabet on the top of other) is a cluster-alphabet in Nepālalipi. Stacking is done with two or more alphabets.

Properties of individual alphabet is preserved in **Chinā-ākha:**. After formation of a cluster, the properties of upper alphabet and lower alphabet remains unchanged. Therefore a new type of alphabet is formed by the combination of different properties.

Properties of alphabet can be presented in two different ways. The first property is related to the application of a diacritic. The other property is related to the combination of physical structure of alphabets.

Physical structure of alphabets

Alphabets are different in shape. Within a defined area, they are differentiated by curves and lines.

Alphabets are categorized by the existence or not-existence of mola(horizontal head stroke line).

All the alphabets contain a vertical line. The vertical line may be a single or double, and straight, curve or both.

Table 14-1 Example of Vertical lines

Single line, straight and curved	Double lines, curved and straight
l, 6, ९	ॡ, ॢ, ॣ, ।, ॥, ०

Top part of vertical line is the ending point of a mola drawn from left to right.

The left part of the vertical line possesses a curved figure and is never disturbed during a cluster formation. The right part of a vertical line may or may not have a figure. If a right part exists, then the right part may be elongated horizontally or vertically downward as per the shape of a lower alphabet. The length of mola may not cover the part of the vertical line. The bottom part of a vertical line is the joining point of another alphabet. It is also a placement point for a U vowel diacritic.

If two vertical lines exist, then the bottom part of second line is a joining point for U vowel diacritic and for joining other alphabets.

If two vertical lines exist, then the top part of first line is taken as a joining point to other alphabets.

If a mola-madu alphabet is stacked with an alphabet containing two vertical lines, then a line is drawn from the middle of first line to the second line.

If mola-madu alphabet is accompanied by an extra vertical line, then a line is drawn from the middle part of the first line to the second line showing the integrity of alphabetical structure. The joining line is known as “JANI:(a belt)”.

Steps for constructing Chinā-ākha:

A cluster presentation therefore is divided into four parts, individual alphabetical structure, stacking, accommodation (change in size of partial part of upper alphabet), and a cluster with diacritic.

A- Structure

- 1-Mola (Horizontal Head stroke line, may or may not be present)
- 2-Vertical line (single, double or curved)
- 3-Left part attached to the vertical line (may be enclosed within two lines)
- 4-Right part attached to the vertical line (may or may not exist)

B- Stacking

Two or more alphabets stacked to form a single alphabet. The properties of stacked alphabets are preserved.

C- Change of size

Alphabets कKA, णNJA, णJA and हHA contain the right part attached to a vertical line which is elongated to retain its structure.

D- Diacritic

The placement of diacritic mark in the case of left, top and right side, is dictated by the upper alphabet of a cluster. The U vowel diacritic shape is dictated by the bottom alphabet of a cluster.

Detail clusters are presented in Annex-V Cluster.

14.1 Constructing Chinā-ākha:

Alphabets कKA has similar properties with alphabets ञNJA, ञJA, हHA. They contain a figure at the right side of its vertical line. This alphabet is also similar to the alphabets with a single vertical line without their right part attached to the vertical line. These alphabets are गGA, चCA, छCHA, टTTA, उDDA, धDHA, ङNGA, तTA, द DA, णNNA, नNA, बWA, वBHA, रRA, यBA and शSHA.

Alphabet खKHA has two vertical lines having two end points at their bottom. Alphabet सSA has the same structure.

Alphabet गGA is a mola-madu alphabet and ञNJA, शSHA, ठTTHA, णNNA, धDHA and णSHA share the same property of a mola-madu alphabet.

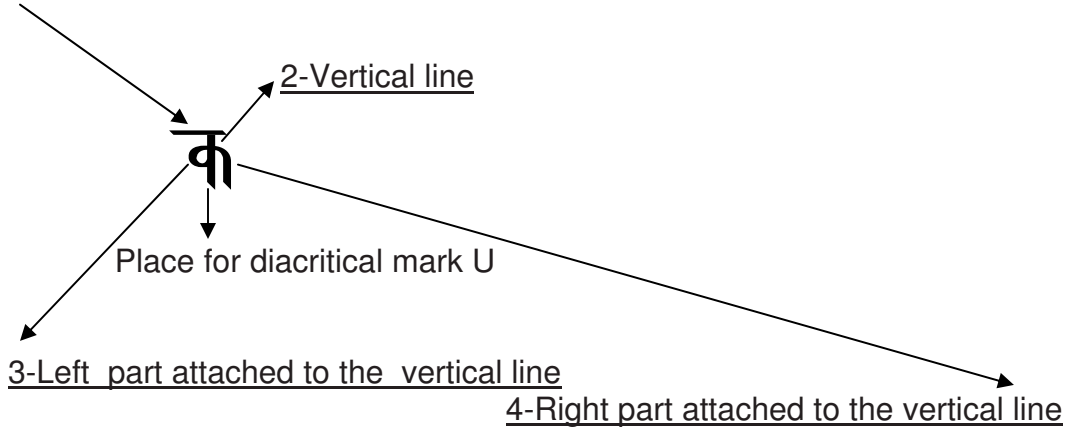
Alphabet घGHA has two vertical lines ending with one end at their bottom. This property is shared by the alphabets ञJHA, यPA, मMA, यYA and षSSA.

Alphabet ङNGA is a single line curved body with two bottom points. Alphabets छCHA and ढDDHA share the same property.

14.1.1 Alphabet क KA (XX08) :

A-Structure

1-Horizontal Head stroke line



B-Stacking

Writing क (KKA) alphabet is the consonant, consonant and Vowel (CCV) cluster of two alphabets कKA and कKA.

Two stacked alphabets of कKA represents upper कKA as a consonant (कK) and lower क KA as a syllabic alphabet. A vertical line is shared by both the alphabets.

C- Accommodation

The right part of an alphabet is extended to accommodate a lower alphabet. Alphabet कKKA keeps its properties as an upper part and lower part. The shape of the upper alphabet is modified to accommodate the lower alphabet कKA..

Table 14.1.1-1

Upper alphabet K showing the right part is extended to accommodate lower alphabet.	The cluster KKA
क, क, क, क	क

D- Diacritic

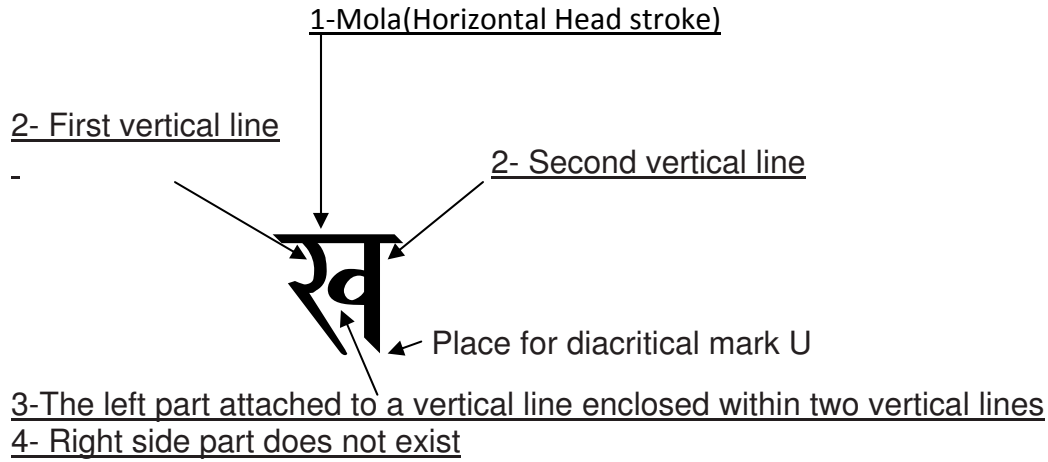
Alphabet KKA retains the property of alphabet KA and alphabet KA. Diacritical mark is applied to KKA as a single alphabet KA.

Table 14.1.1-2

KKA	KKAA	KKI	KKU	KKE	KKO
क	का	कि	कु	के	को

14.1.2 Alphabet ख KHA-XX09

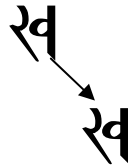
A- Structure



B-Stacking

The lower point of the second vertical line of the top alphabet joins with the top part of first vertical line of lower alphabet.

Figure 14.1.2-1



C- Accommodation

The vertical line is extended vertically to touch extended horizontal line.

Table 14.1.2-1

Upper alphabet KH	Stacking of second vertical line of the lower alphabet	Extension of mola	Cluster KHKHA
ख	ख _ख ↑	ख _ख →	ख _ख

D- Diacritic

Alphabet KHKHA is derived from the property of alphabet KHA and alphabet KHA. Diacritical mark is applied to KHKHA as a single alphabet KHA.

Table 14.1.2-2

KHKHA	KKHAA	KHKHI	KHKHU	KHKHE	KHKHO
ख	खा	खि	खु	खे	खो

14.1.2.1 Cluster formation between Alphabet KA and KHA

Alphabet KA has one vertical line.

Alphabet KHA has two vertical lines.

The top of first vertical line is joined to the bottom of upper vertical line. The second vertical line of lower alphabet KHA is extended vertically till the level of horizontal head stroke. The horizontal head stroke of upper alphabet is then extended to meet the extended vertical line of the lower alphabet.

Table 14.1.2-3

Upper K and Lower KHA	KA is compromised to accommodate KHA	Vertical line of lower KHA extended	Required the extension of horizontal line	Cluster KKHA
क ख	क ख	क ↑	क →	क

Alphabet KKHA inherits the property of alphabet KA and alphabet KHA. Diacritical mark is applied to KHKHA as a single alphabet.

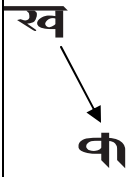
Table 14.1.2-4

KKHA	KKHAA	KKHI	KKHU	KKHE	KKHO
क	का	कि	कु	के	को

14.1.2.2 Cluster formation between Alphabet KHA and KA

Alphabet KHA and KA is a cluster of two alphabets, the upper alphabet with double vertical lines and lower alphabet with a single vertical line.

Table 14.1.2-5

The bottom point of second vertical line of upper alphabet is joined with top point of second vertical line	Cluster KKHA
	

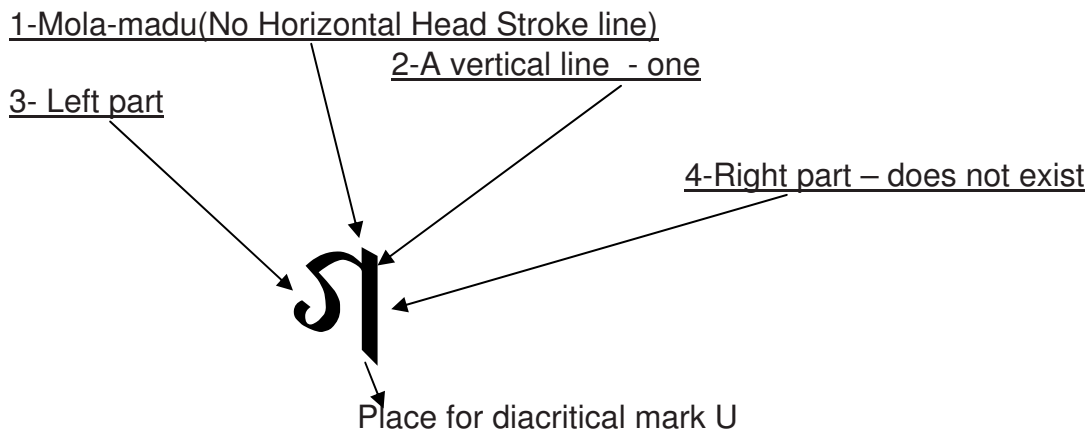
Alphabet KHKA retains the property of alphabet KHA and alphabet KA.
Diacritical mark is applied to KHKA as a single alphabet.

Table 14.1.2-6

KHKA	KHKAA	KHKI	KHKU	KHKE	KHKO
ख	खा	खि	खू	खे	खो

14.1.3 Alphabet ੜ GA-XX0A

A- Structure



B-Stacking

Two stacked alphabets of GA which represents upper GA represents a GA consonant and lower presents GA. A vertical line is shared by both the alphabets.

Table 14.1.3-1

Joining of Upper G with lower GA	The cluster is ੜ GGA

C-Accommodation

The shape of an alphabet is not compromised.

D- Diacritic

Alphabet GGA retains the property of alphabet GA with mola-madu property and lower alphabet GA as GA, TA, BHA, SHA group. Diacritical mark is applied to GGA as a single alphabet GA.

Table 14.1.3-2

GGA	GGAA	GGI	GGU	GGE	GGO	GGAA & " JANI:"(belt)
ੜ	ੜਾ	ੜਿ	ੜੁ	ੜੇ	ੜੋ	ੜਾ, ੜਿ, ੜੁ, ੜੇ, ੜੋ

The vertical lines are joined by a slash line, named " JANI:"(belt) and is placed at the middle or slightly below the top part of vertical line of the alphabet.

14.1.3.1 Cluster formation between alphabet KA and GA

Alphabet KGA is a cluster of two alphabets, upper alphabet with a single vertical line and lower alphabet with a single vertical line.

Table 14.1.3-3

The bottom part of the vertical line of upper alphabet is joined with the upper part of the vertical line of lower alphabet.	The right part of the vertical line of upper alphabet K is compromised to retain its shape.
	

Alphabet KGA retains the property of alphabet K and alphabet GA. Therefore KGA alphabet possesses the property inherited from KA and GA. Diacritical mark is applied to KGA as a single alphabet with U vowel diacritic as GA, TA, BHA, SHA group..

Table 14.1.3-4

KGA	KGAA	KGI	KGU	KGE	KGO
𑂔	𑂔𑂀	𑂔𑂀𑂐	𑂔𑂀𑂐	𑂔𑂀𑂐	𑂔𑂀𑂐

14.1.3.2 Cluster formation between alphabet GA and KA

Alphabet GKA is a cluster of two alphabets, upper alphabet with a single vertical line with mola-madu type and lower alphabet with a single vertical line.

Table 14.1.3-5

Joining of upper G and lower KA	Stacking G & KA
	

Alphabet GKA retains the properties of alphabet GA and alphabet KA. Diacritical mark is applied to GKA as a single alphabet.
Vowel diacritic is applied as a mola-madu alphabet.

Table 14.1.3-6

GKA	GKAA	GKI	GKU	GKE	GKO
ꣳ	ꣳꣳ	ꣳꣳ	ꣳꣳ	(ꣳ)	(ꣳꣳ)

14.1.3.3 Cluster formation between Alphabet KHA and GA

Alphabet KHGA is a cluster of two alphabets, upper alphabet with double vertical lines and lower alphabet with a single vertical line.

Table 14.1.3-7

Joining of upper KH with lower GA	Cluster KHGA
ꣳꣳ ꣳꣳ	ꣳꣳꣳ

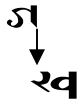
Alphabet KHGA retains the properties of alphabet KHA and alphabet GA. Diacritical mark is applied to KHGA as a single alphabet with U vowel diacritic as GA, TA, BHA, SHA group.

Table 14.1.3-8

KHGA	KHGAA	KHGI	KHGU	KHGE	KHGO
ꣳꣳ	ꣳꣳꣳ	ꣳꣳꣳ	ꣳꣳꣳ	ꣳꣳꣳ	ꣳꣳꣳꣳ

14.1.3.4 Cluster formation between Alphabet GA and KHA
 Alphabet GA has one vertical line.
 Alphabet KHA has two vertical lines.

Table 14.1.3-9

Joining of G with KHA	Vertical line extended	Joining of top alphabet with the extended vertical line of lower alphabet by a JANI: (belt).	Cluster KHGA
			

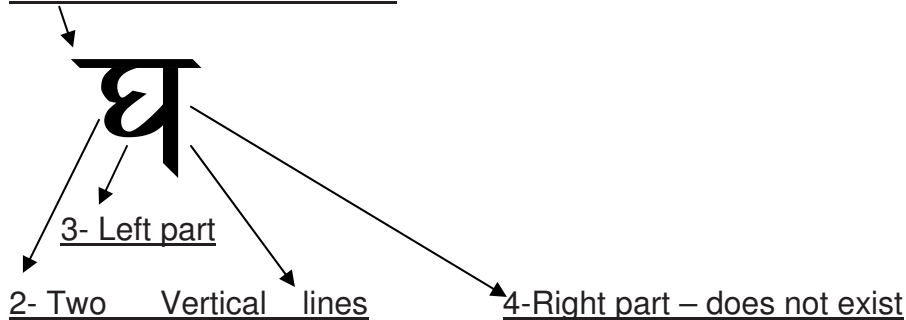
Alphabet GKHA retains the property of alphabet GA and alphabet KHA. Diacritical mark is applied to GKHA as a single alphabet.

Table 14.1.3-10

GKHA	GKHAA	GKHI	GKHU	GKHE	GKHO
					

14.1.4 Alphabet घ GHA-XX0B

1- A Horizontal head stroke



B-Stacking

Two stacked alphabets of GHA which represent an upper GHA and represents a GH consonant, and the lower presents GHA. A vertical line is shared by both the alphabets.

C- Accommodation

The first vertical line of the bottom alphabet is joined to the bottom point of upper vertical line. The second vertical line of the bottom alphabet is extended vertically to the level of a horizontal line. The horizontal head stroke of upper alphabet is then extended to meet the extended vertical line of the lower alphabet.

Table 14.1.4-1

Stacking of upper and lower alphabet of GH with GHA	Extension of lower alphabet GHA	Extension of horizontal head stroke

D- Diacritic

Alphabet GHGHA retains the property of alphabet GHA and alphabet GHA. Diacritical mark is applied to GHGHA as a single alphabet.

Table 14.1.4-2

GHGHA	GHGHAA	GHGHI	GHGHU	GHGHE	GHGHO

14.1.4.1 Cluster formation between alphabet KA and GHA

Alphabet KA has one vertical line.

Alphabet GHA has two vertical lines.

Table 14.1.4-3

Joining of Upper K with lower GHA	Extension of vertical Line of GHA	Extension of horizontal line	Cluster KGHA

Alphabet KGHA retains the property of alphabet KA and alphabet GHA.. Diacritical mark is applied to KGHA as a single alphabet.

Table 14.1.4-4

KGHA	KGHAA	KGHI	KGHU	KGHE	KGHO

14.1.4.2 Cluster formation between alphabet GHA and KA

Alphabet GHA has two vertical lines.

Alphabet KA has one vertical line.

Table 14.1.4-5

Joining of upper GH with lower KA	Cluster GHKA

Alphabet GHKA retains the properties of alphabet GHA and alphabet KA. Diacritical mark is applied to GHKA as a single alphabet.

Table 14.1.4-6

GHKA	GHKAA	GHKI	GHKU	GHKE	GHKO
क	का	कि	कु	के	को

14.1.4.3 Cluster formation between Alphabet KHA and GHA

Table 14.1.4-7

Stacking of upper KH with lower GHA	Vertical line extended	Extension of horizontal line	Cluster KHGA
ख ↓ घ	खघ↑	खघ→	खघ

Alphabet KHGHA retains the properties of upper alphabet KHA and lower alphabet GHA. Diacritical mark is applied to KHGHA as a single alphabet.

Table 14.1.4-8

KHGHA	KHGHA A	KHGHI	KHGHI U	KHGHE	KHGHO
खघ	खघा	खिघ	खुघ	खेघ	खोघ

14.1.4.4 Cluster formation between Alphabet GHA and KHA

Alphabet GHA has two vertical lines.

Alphabet KHA has two vertical lines.

Table 14.1.4-9

Joining of upper GH with lower KHA	Vertical line extended	Extension of horizontal line	Cluster GHKHA
घ ↓ ख	घख↑	घख→	घख

Alphabet GHKHA retains the property of upper alphabet GHA and lower alphabet KHA. Diacritical mark is applied to GHKHA as a single alphabet.

Table 14.1.4-10

GHKHA	GHKHAA	GHKHI	GHKHU	GHKHE	GHKHO
घ	घा	घि	घु	घे	घो

14.1.4.5 Cluster formation between Alphabet GHA and GA

Alphabet GHA has two vertical lines.

Alphabet GA has one vertical line.

Alphabet GHGA retains the properties of alphabet GHA and alphabet GA.

Table 14.1.4-11

Joining of GH with GA	Cluster GHGA
घ ↓ ग	घग

Diacritical mark is applied to GHGA as a single alphabet.

U vowel diacritic is applied as GA,TA,BHA,SHA group.

Table 14.1.4-12

GHGA	GHGAA	GHGI	GHGU	GHGE	GHGO
घ	घा	घि	घु	घे	घो

14.1.4.6 Cluster formation between alphabet GA and GHA

Alphabet GA has one vertical line.

Alphabet GHA has two vertical lines.

Alphabet GGHA retains the properties of alphabet GA and alphabet GHA.

Table 14.1.4-13

Joining of G with GHA	Extension of second vertical line of the lower alphabet	Joining of extended second vertical line with a jani:(belt)	Cluster GGHA
			

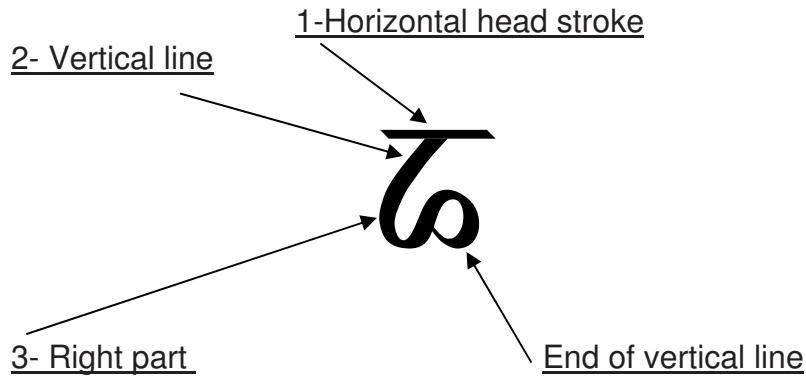
Diacritical mark is applied to GGHA as a single alphabet.

Table 14.1.4-14

GGHA	GGHAA	GGHI	GGHU	GGHE	GGHO
					

14.1.5 Alphabet 𑌶 NGA-XX0C

A- Structure



B-Stacking

Table 14.1.5-1

Joining of Upper alphabet NG with a lower alphabet NGA	The cluster NGNGA

The end of vertical line of upper alphabet is joined to the starting point of vertical line of the lower alphabet.

C- Diacritic

Alphabet NGNGA retains the property of alphabet NG and alphabet NGA. Diacritical mark is applied to NGNGA as a single alphabet.

Table 14.1.5-2

NGNGA	NGNGAA	NGNGI	NGNGU	NGNGE	NGNGO
𑌶	𑌶𑌶	𑌶𑌶𑌶	𑌶𑌶𑌶𑌶	𑌶𑌶𑌶𑌶𑌶	𑌶𑌶𑌶𑌶𑌶𑌶

14.1.5.1 Cluster formation between Alphabet KA and NGA

Alphabet KA has one vertical line.

Alphabet NGA has two vertical lines.

Table 14.1.5-3

Joining of upper K with lower NGA	Extension of right part of upper alphabet K	Cluster KNGA
		

Alphabet KNGA retains the property of alphabet KA and alphabet NGA. Diacritical mark is applied to KNGA as a single alphabet.

Table 14.1.5-4

KNGA	KNGAA	KNGI	KNGU	KNGE	KNGO
					

14.1.5.2 Cluster formation between Alphabet NGA and KA

Alphabet NGA has one vertical line.

Alphabet KA has one vertical line.

Table 14.1.5-5

Joining of upper NG with lower KA	Cluster NGKA
	

Alphabet NGKA retains the property of alphabet NGA and alphabet KA. Diacritical mark is applied to NGKA as a single alphabet.

Table 14.1.4-6

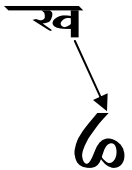
NGKA	NGKAA	NGKI	NGKU	NGKE	NGKO
					

14.1.5.3 Cluster formation between Alphabet KHA and NGA

Alphabet KHA has two vertical lines.

Alphabet NGA has one vertical line.

Table 14.1.5-7

Joining of Upper KH with lower NGA	Cluster KHGA
	

Alphabet KHNGA retains the property of alphabet KHA and alphabet NGA. Diacritical mark is applied to KHNGA as a single alphabet.

Table 14.1.5-8

KHNGA	KHNGAA	KHNGI	KHNGU	KHNGE	KHNGO
					

14.1.5.4 Cluster formation between Alphabet NGA and KHA

Alphabet NGA has two vertical lines.

Alphabet KHA has two vertical lines.

Table 14.1.5-9

Joining of upper NG with lower KHA	Vertical line extended	Extension of horizontal line	Cluster NGKHA
			

Alphabet NGKHA retains the property of alphabet NGA and alphabet KHA. Diacritical mark is applied to NGKHA as a single alphabet.

Table 14.1.5-10

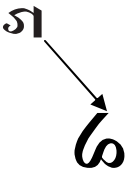
NGKHA	NGKHAA	NGKHI	NGKHU	NGKHE	NGKHO
					

14.1.5.5 Cluster formation between Alphabet GA and NGA

Alphabet GA has two vertical lines.

Alphabet NGA has one vertical line.

Table 14.1.5-11

Joining of upper G with lower NGA	Cluster GNGA
	

Alphabet GNGA retains the property of alphabet GA and alphabet NGA. Diacritical mark is applied to GNGA as a single alphabet.

Table 14.1.5-12

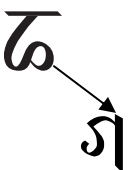
GNGA	GNGAA	GNGI	GNGU	GNGE	GNGO
					

14.1.5.6 Cluster formation between Alphabet NGA and GA

Alphabet NGA has two vertical lines.

Alphabet GA has two vertical lines.

Table 14.1.5-13

Joining of upper NG with lower GA	Cluster NGGA
	

Alphabet NGGA retains the property of alphabet NGA and alphabet GA. Diacritical mark is applied to NGGA as a single alphabet.

Table 14.1.5-14

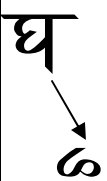
NGGA	NGGAA	NGGI	NGGU	NGGE	NGGO
					

14.1.5.7 Cluster formation between Alphabet GHA and NGA

Alphabet GHA has two vertical lines.

Alphabet NGA has one vertical line.

Table 14.1.5-15

Joining of upper GH with lower NGA	Cluster GHNGA
	

Alphabet GHNGA retains the property of alphabet GHA and alphabet NGA. Diacritical mark is applied to GHNGA as a single alphabet.

Table 14.1.5-16

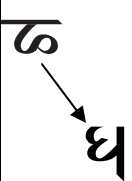
GHNGA	GHNGAA	GHNGI	GHNGU	GHNGE	GHNGO
					

14.1.5.8 Cluster formation between alphabet NGA and GHA

Alphabet NGA has one vertical line.

Alphabet GHA has one vertical line.

Table 14.1.5-17

Joining of upper NG with lower GHA	Extension of vertical line of GHA	Extension of horizontal line	Cluster NNGHA
			

Alphabet NNGHA retains the property of alphabet NGA and alphabet GHA. Diacritical mark is applied to NNGHA as a single alphabet.

Table 14.1.5-18

NNGHA	NNGHAA	NNGHI	NNGHU	NNGHE	NNGHO
					

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Annex-II Rendering Nepaalalipi Script

Rendering Nepaalalipi Script explains rules for minimal rendering of Nepaalalipi script as part of a plain text sequence. It gives a map and sequential placement between UNICODE character and the glyph in a Nepaalalipi font. Fifteen rules from RR1 to RR15 are described along with YA and WA combining characters.

Convention :

Ākha: - Single or multiple consonants with or without a vowel or with a diphthong.

Bā-ākha: - Single alphabet with a vowel A at its end. Syllable CV, where V is represented by a vowel.

Chinā-ākha:(CnVm)- Consonant cluster or Consonant and a cluster with or without diacritic mark. Note:- CnVm where n represents number of consonants and m represent number vowels.

Consonant – A Letter or a cluster with a consonantal mark at its bottom.

UL - Upper letter – Consonant, which can exist only in cluster format.
ML - Middle letter – Consonant, which can exist only in cluster format.
LL - Lower letter – Bā-ākha:, which can exist only in cluster format.

Head-stroke – An element placed at the top of a Mola-du alphabet

~ (°) - Nasalization diacritic –a vowel modifier –

(Example: Nasal Sound Vowels are Ā,AA,Ī, Ū,Ē,Ō,(Ă, AĂ,Ĭ,Ū,Ĕ,Ŏ)

: - Long Sound diacritic –a vowel modifier -

(Example: Long Sound Vowels are A:,AA:,I:,U:,E:,O:.)

NLNJ - NEPAALALIPi NON-JOINER

NLJ - NEPAALALIPi JOINER

NLY - NEPAALALIPi SEMIVOWEL-Y

NLW - NEPAALALIPi SEMIVOWEL-W

NLUL - NEPAALALIPi UPPER LETTER MARK

NLLL - NEPAALALIPi LOWER LETTER MARK

CC – Combining Character

CCC – Consonantal Combining Character- ॠ

VCC – Vowel Combining Character- ॡ, ॢ, ॣ, ।, ॥, ०, १

VMCC – Vowel Modifier Combining Character- ०

FVMCC – Functional Vowel Modifier Combining Character- ०

CCY – Combining Character YA-

CCW – Combining Character WA-

RRn - Rendering Rule (n stands for numerals from 1 to 14)

Consonantal Combining Character – ् CCC

***RR1-If a Bā-ākha: precedes a consonantal diacritic mark,
then the Bā-ākha: changes into a consonant .***

Figure 1 Formation of a Consonant

			Display	Glyph Order	Character Order
a) KA +	CCC	->	K		
क +	्	->	क्	क, ्	क,्

RR2- If CCC is preceded by any other CC, then the CCC will replace the last CC.

Figure 2 Replacement of one CC by another

Charcter	Combining Character	Display	Glyph Order	Character Order
KA,CCC +	CCC	-> K		
क,् +	्	-> क्	क, ्	क,्
KA,CCC+	VCC	-> KAA		
क,् +	ा	-> का	क, ा	क,ा
KA,CCC +	FVMCC	-> KA:		
क,् +	ः	-> कः	क, ः	क,ः
KA,CCC +	VMCC	-> KĀ		
क,् +	ँ	-> कँ	क, ँ	क,ँ

RR3- If a consonant or consonantal cluster precedes Bā-ākha:, then both are joined together to form a cluster.

Figure -3 Formation of a Cluster- Consonant and a Bā-ākha:

Consonant	Bā-ākha:	Chinā-ākha: Display	Glyph Order	Character Order
M + PA म् + य	-> MPA -> म्	MPA म्	M _{UL} , P _{LL} म, य	म, य
K + SSA क् + ष	-> KSSA > क्	KSSA क्	Ligature KSSA क्	क, ष
J + NJA ज् + ञ	-> JNJA -> ज्	JNJA ज्	Ligature JNJA ज्	ज, ञ

RR4- If a consonant or consonantal cluster precedes Bā-ākha:, then both are joined together to form a single cluster or extreme left alphabet is displayed with consonantal mark and other will form a new cluster.

Figure -4 Consonant Cluster and a Bā-ākha:

a) Formation of a cluster

Consonant Cluster	Bā-ākha:	Chinā-ākha: Display	Glyph Order	Character Order
MP + YA म् + य	-> MPYA -> म्	MPYA म्	M _{UL} , P _{ML} , Y _{LL} म, य, य	म, य, य

b) Failed to form a cluster

Consonant Cluster	Bā-ākha:	Chinā-ākha: Display	Glyph Order	Character Order
KN + YA क् + य	-> KNYA -> क्	KNYA क्	N _{UL} , Y _{LL} क, न, य	क, न, य

RR5- If CCC is placed after one or more CCs, then all CCs will be replaced by CCC.

Figure -5 Replacement of one CC by the other.

Character with CC	Added CC	Display	Glyph Order	Character Order
KAA	+ CCC	-> K	क, ँ	क, ्
क, ा	+ ्	-> क्		
KAAँ	+ CCC	-> K	क, ँ	क, ्
क, ा, ँ	+ ्	-> क्		
KAAः	+ CCC	-> K	क, ँ	क, ्
क, ा, ँ, ः	+ ्	-> क्		

Vowel Combining Character—ा, ि, ्र, ॅ, ॊ

RR6- If a Bā-ākha: or Chinā-ākha: precedes a AA and U vowel diacritical mark, they are stored logically in a character order.

Figure -6 “AA” vowel diacritic mark applied to mola-du

Bā-ākha:	VCC	ākha:	Display	Glyph Order	Character Order
KHA	+ AA	->	KHAA	ख,ा	ख,ा
ख	+ा	->	खा		
KKHA	+ AA	->	KKHAA	KUL, KHLL, AA	क,्र,ख,ा
क्ख	+ा	->	क्खा	क, ख, ,ा	

Figure -7 “AA” vowel diacritic mark applied to mola-madu

Mola-madu bā-ākha:	VCC	Ākha:	Display	Glyph Order	Character Order
GA	+ AA	->	GAA	ग,ा	ग,ा
ग	+ा	->	गा		
GKA	+ AA	->	GKAA	GUL, KLL, AA	ग,्र,क,्र,ा
क्ग	+ा	->	क्गा	ग, क, ,ा	

Figure -8 “U” vowel diacritic mark

Bā-ākha:	Vowel	->ākha:	Display	Glyph Order	Character Order
MA	+U	->	MU	म, ्र	म,्र
म	+्र	->	म्		
KMA	+U	->	KMU	KUL, MLL, U	क,्र,म,्र
क्म	+ र	->	क्म्र	क, म, ्र	

Figure -9 “U” vowel diacritic mark with GA, TA,VA,SHA alphabet

Bā-ākha:	Vowel	->ākha: Display	Glyph Order	Character Order
VA	+U ->	VU	ग, ु	ग, ु
ए	+Q ->	गु		
KVA	+U ->	KVU	KUL, VLL, U	क, ु, ग, ु
रु	+Q ->	रु	क, ु, ग, ु	

RR7- If a Bā-ākha: or Chinā-ākha: precedes a I,E,O,AI and AU vowel diacritical mark, they are stored logically in a character order .This diacritic also uses the extreme left space of the orthographic syllable.

Figure -10 “I” vowel diacritic mark

Bā-ākha:	VCC	Ākha:	Glyph Order	Character Order
GHA	+ I	-> GHI	ि, घ	घ, ि
घ	+ ि	-> घि		
KGHA	+ I	-> KGHI	I, KUL, GHLL,	क, ु, घ, ि
क्घ	+ ि	-> क्घि	ि, क, घ	

Figure -11 “E” vowel diacritic mark

Bā-ākha:	VCC	Ākha:	Glyph Order	Character Order
NA	+ E ->	NE	ँ, ङ	ङ, ँ
ङ	+ ँ ->	ङँ		
KNA	+ E ->	KNE	E, KUL, NLL,	क, ु, ङ, ि
क्ङ	+ ँ ->	क्ङँ	ँ, क, ङ	

Figure -12 “E” vowel diacritic mark applied to mola-madu

Bā-ākha:	VCC	Ākha: Display	Glyph Order	Character Order
THA थ	+ E + ै	-> THE -> (थै	(,थ	थ,ै
THKA थ्क	+ E + ै	-> THKE -> (थ्कै	E, THUL, KLL (,थ , क	थ,्,क,ै

Figure -13 “O” vowel diacritic mark

Bā-ākha:	Vowel	->Ākha: Display	Glyph Order	Character Order
JHA म	+ O + ा	-> JHO ->मा	म,म	म,ा
KJHA क्क	+ O + ा	-> KJHO ->क्का	O, THUL, KLL म, क, म	क,्,म,ा

Figure -14 “O” vowel diacritic mark_applied to mola-madu

Bā-ākha:	Vowel	->ākha: Display	Glyph Order	Character Order
SHA श	+ O + ा	-> SHO -> (शा	(ा , श	श,ा
SHLA श्ल	+ O + ा	-> SHLO -> (श्ला	O, SHUL,LLL (ा , श, ल	श,्,ल,ा

Figure -15 “AI” Diphthong diacritic mark-ૐ

Bā-ākha:	Vowel	->Ākha: Display	Glyph Order	Character Order
TA ᳚	+ AI + ૐ	-> TAI -> ᳚ૐ	᳚, ૐ	᳚, ૐ
TWA ᳚	+ AI + ૐ	-> TWAI -> ᳚ૐ	AI, ᳚ ^{TUL} , W ^{LL} , ૐ, ૐ	᳚, ૐ, ૐ

Figure -16 “AI” Diphthong diacritic mark (ૐ) applied to mola-madu

Bā-ākha:	Vowel	->Ākha: Display	Glyph Order	Character Order
DHA ધ	+ AI + ૐ	-> DHAI -> ધૐ	ૐ, ધ	ધ, ૐ
DHWA ઘ	+ AI + ૐ	-> DHWAI -> ઘૐ	AI, DH ^{UL} , W ^{LL} ૐ, ધ, ૐ	ધ, ૐ, ૐ

Figure -17 “AU” Diphthong diacritic mark-ૐ

Bā-ākha:	Vowel	-> ākha: Display	Glyph Order	Character Order
DA દ	+ AU + ૐ	-> DAU -> દૐ	ૐ, દૐ	દ, ૐ
DDHA ઢ	+ AU + ૐ	-> DDHAU -> ઢૐ	AU, D ^{UL} , DH ^{LL} ૐ, ૐ, ધ	દ, ૐ, ધ, ૐ

Figure -18 “AU” Diphthong diacritic mark(ୱ)applied to mola-madu

Bā-ākha:	Vowel	->ākha: Display	Glyph Order	Character Order
SHA ଶ	+ AU + ୱ	-> SHAU ->ଶୱ	(ୱ,ଶ)	ଶ,ୱ
SHNA ଶ୍ନ	+ AU + ୱ	-> SHNAU ->ଶ୍ନୱ	AU, SH _{UL} , N _{LL} (ୱ, ଶ, ଣ,	ଶ,୍ନ,ୱ

Vowel Modifier Combining Character- ँ-VMCC

RR8- If Bā-ākha: or Chinā-ākha: or VCC is followed by a VMCC, they are stored logically in a character order.

Figure -19 Nasal Sound diacritic mark- a vowel modifier

Character	Diacritic	Display	Glyph Order	Character Order
DA द	+ ँ	-> दँ	द, ँ	द, ँ
DWA द्व	+ ँ	-> द्दँ	DUL, WLL, Nasal Mark द, व, ँ	द, व, ँ
DWI द्वि	+ ँ	-> द्विँ	I, DUL, WLL, Nasal Mark ि, द, व, ँ	द, व, ि, ँ

NOTE: VMCC can exist either after Bā-ākha: or after VCC

Functional Vowel Modifier Combining Character-◌᳚-FVMCC

Functional Vowel Modifier with Vowel Combining Character

Figure -20 Long Sound diacritic mark- a vowel modifier

a)	Bā-ākha:		FVCC	-> ākha:	
	DA	+	Long Sound	-> DA:	
	Character		Diacritic	Display	Glyph Order Character Order
	द	+	◌᳚	-> द᳚	द,◌᳚ द,◌᳚

RR9- If FVMCC is placed after I or U VCC, then the CC diagraph is replaced by a monograph.

Figure -21 Long Sound diacritic mark- a vowel modifier

Character	Diacritic	Display	Glyph Order	Character Order
Ākha: FVCC	-> ākha: with a monograph mark			
DI	+ Long Sound	-> DI:		
दि	+ ◌᳚	-> दी	द , ी	द,ि,◌᳚
DU	+ Long Sound	-> DU:		
दु	+ ◌᳚	-> दू	द , ू	द,ू,◌᳚

RR10- If FVMCC is placed after VMCC, then the CC diagraph is replaced by a monograph.

Figure -22 Nasal and Long Sound diacritic mark together

Character	Diacritic	Display	Glyph Order	Character Order
DA	+ Long Sound	-> DĀ:		
दै	+ ◌᳚	-> दै	Long Nasalization Mark द , ै	द,ँ,◌᳚
DĪ	+ Long Sound	-> DĪ:		
दि	+ ◌᳚	-> दि	ि, द, ै	द,ि,ँ,◌᳚
DŪ	+ : Long Sound	-> DŪ:		
दु	+ ◌᳚	-> दू	द, ू, ै	द,ू,ँ,◌᳚

Restricted Sequence of Combining Characters

RR11- *If restricted sequence of CCs are placed together, then all CCs will be replaced by the last CC alone.*

7.1 With CCC(̣) no other CC(̣̇, ̣̈, ̣̉) is allowed

7.2 There should not be any CC before VCC(̣̇)

Sequence ̣̇, ̣̈ is not allowed. Result ̣̈.

Sequence ̣̇, ̣̉ is not allowed. Result ̣̉.

Sequence ̣̇, ̣̇ is not allowed. Result ̣̇

7.3 VMCC(̣̈) is not allowed before VCC(̣̇)

Sequence ̣̈, ̣̇ is not allowed. Result ̣̇

7.4 FVMCC(̣̈) is not allowed before other CC(̣̇, ̣̈, ̣̉)

Sequence ̣̈, ̣̈ is not allowed. Result ̣̈

Sequence ̣̈, ̣̇ is not allowed. Result ̣̇

Sequence ̣̈, ̣̉ is not allowed. Result ̣̉

7.5 Two same CCs are not allowed.

Sequence ̣̈, ̣̈ is not allowed. Result ̣̈

Preventing Cluster Formation

RR12- If a consonant or a consonant cluster precedes a NLNJ mark, cluster formation is prevented.

Figure -23 Preventing Cluster Formation in Nepālalipi

Character+NLNJ +SSA -> Display	Glyph Order	Character Order
KAc +NLNJ +SSA -> KAc,SSA क + NLNJ + ष -> कष	क , ँ, ष	क, ँ, NLNJ, ष

RR13-If a consonant precedes a NLUL mark, upper-letter is displayed.

Figure -24 Upper Letter Display

Character + NLUL -> Display	Glyph Order	Character Order
K +NLUL -> K _{UL} क +NLUL -> क	क	क, ँ, NLUL

Figure -25 Use of Upper-Letter

Character + NLUL+ Bā-ākha: -> Display	Glyph Order	Character Order
Upper-Letter Bā-ākha: Cluster K ^{UL} + SSA -> KSSA क + ष -> कष	K _{UL} SS _{LL} क, ष	क, ँ, NLUL, ष

Figure -26 Lower Letter Display

Character + NLUL -> Display	Glyph Order	Character Order
KA +NLLL -> KA _{LL} क +NLLL -> क	KA _{LL} क	क, ँ, NLLL

Combining Character and Alphabet “𑑖RA”

Combination of a consonant alphabet “RA” with other consonants is rare in Nepālabhāsā. In fact, it is treated as an allograph of the alphabet “L”.

The treatment for a consonant “R” is different in many ways.

1) “u” Vowel diacritic mark is not placed at the bottom but at the right side of letter.

2) Its upper-letter in a cluster resembles a diacritic mark.

3) “𑑖 RRI ” Combining Character converts *Bā-ākha:*, into RRI syllable..

“u” Vowel diacritic mark is not placed at the bottom but at the right side of letter.

“U” Vowel diacritic mark is not placed at the bottom but at the right side of a letter.

Example : Letter “R” and “U” vowel diacritical mark.

Figure -27 a) Consonant R as a single letter

RA + “U” Vowel mark -> RU

𑑖 + 𑑖 -> 𑑖

Figure 28 b) RA within a cluster as lower alphabet

KRA + “U” Vowel mark -> KRU

𑑖 + 𑑖 -> 𑑖

R as an upper-letter in a cluster resembles a diacritical mark

Consonantal alphabet “r” as upper-letter when preceded by other *Bā-ākha:*, it changes into its upper form and other *Bā-ākha:* will remain as it is.

Figure -29- Cluster with a letter “R”

Character	Diacritic	Display	Glyph Order	Character Order
R	+ KA	-> RKA	𑑖, 𑑖	𑑖, 𑑖, 𑑖
𑑖	+ 𑑖	-> 𑑖		

Figure -30- Cluster “R” and “AI” diacritic

Character	Diacritic	Display	Glyph Order	Character Order
RKA	+ AI	-> RKAI	𑑖, 𑑖, 𑑖	𑑖, 𑑖, 𑑖, 𑑖
𑑖	+ 𑑖	-> 𑑖		

Figure -31- Cluster “R” and “AU” diacritic

Character	Diacritic	Display	Glyph Order	Character Order
RKA	+ AU	-> RKAU	𑑖, 𑑖, 𑑖	𑑖, 𑑖, 𑑖, 𑑖
𑑖	+ 𑑖	-> 𑑖		

Application of syllabic mark “RRI ” - ॠ

RR14-If any Bā-ākha: precedes “RRI Syllabic Mark” then a syllable is formed with “RRI” mark.

Figure 32- Cluster with a Syllabic Mark “RRI”

Character	Diacritic	Display	Glyph Order	Character Order
Bā-ākha:		-> ākha:		
KA	+ RRI Syllabic Mark	-> KRRI		
क	+ ॠ	-> कृ	क , ॠ	क , ॠ

RR15 – If A vowel precedes a NLJ mark and precedes I or U vowel then ligature of AI or AU is displayed.

Figure 33- Vowel A with a vowel I

Vowel A + NLJ+ Vowel I- >Display AI	Glyph Order	Character Order
अ _A + NLJ + ॠ I -> ॠAI	अ, NLJ, ॠ	अ, NLJ, ॠ

Figure 34- Vowel A with a vowel U

Vowel A + NLJ+ Vowel AU- >Display AU	Glyph Order	Character Order
अ _A + NLJ + उ U -> ॠ AU	अ, NLJ, उ	अ, NLJ, उ

य(YA) and ँ(WA) Combining Character

Letter YA and WA are semivowels and have ability to combine with all consonants to make another syllable. It is a custom to present a YA and WA cluster in a syllabic form. To separate the cluster from other consonant clusters, a separate combining character is presented with the combination of other codes.

Convention:

YCC – YA Combining Character

WCC – WA Combining Character

NOTE:

YCC is equivalently taken as **E vowel CC and A vowel** (ँ, ॡ)

WCC is equivalently taken as **O Vowel CC and A vowel** (ं, ॢ)

Excluding semivowels, bā-ākha: combines with YCC and WCC to form a syllabic cluster.

Figure 35-, YCC and WCC with Bā-ākha:

Bā-ākha:	YCC /WCC	Display	Code Sequence
a) कKA	+ य(ँ, ॡ)YA	= कय(KYA)	क,ँ,ॡ
b) कKA	+ ँ(ं, ॢ)WA	= क्वा(KWA)	क,ं,ॢ
c) नRA	+ य(ँ, ॡ)YA	= र्य(RYA)	न,ँ,ॡ
d) नRA	+ ँ(ं, ॢ)WA	= र्वा(RWA)	न,ं,ॢ

YA and WA CCs have ability to combine with other VCC to present different sets of Combining Characters .

Figure 36- YA and WA CCs have ability to combine with other VCC

YCC	with VCC makes	new CC, representing diphthong CC
य (ँ, ॡ)	+ ा	= ॡा ;ँ, ॡा
य (ँ, ॡ)	+ ि	= ॡि ;ँ, ॡि
य (ँ, ॡ)	+ ु	= ॡु ;ँ, ॡु
य (ँ, ॡ)	+ ॊ	= ॡॊ ;ँ, ॡॊ
य (ँ, ॡ)	+ ॑	= ॡ॑ ;ँ, ॡ॑

WCC	with VCC makes		new CC, representing diphthong CC
क (क, य)	+ ा	=	का क, आ
क (क, य)	+ ि	=	कि क, ई
क (क, य)	+ ू	=	कु क, ऊ
क (क, य)	+ ै	=	कै क, ऐ
क (क, य)	+ ो	=	को क, औ

Syllabic Cluster with a AA Vowel CC makes another syllabic cluster .

Figure 37- Syllabic Cluster and VCC

Syllabic Cluster	AA Vowel CC		Syllabic Cluster	Code Sequence
a) क (KYA)	+ ा	=	का (KYAA)	क, ँ, आ
b) क (KWA)	+ ो	=	को (KWAA)	क, औ, आ

Syllabic Cluster with a Vowel Modifier VM CC makes another syllabic cluster .

Figure --38 Syllabic Cluster and Vowel Modifier VM CC

Syllabic Cluster	VMCC	Display	Code Sequence
a) क (KYA)	+ ँ	= क	क, ँ, य, ँ
b) क (KWA)	+ ँ	= क	क, औ, य, ँ
c) का (KYAA)	+ ँ	= का	क, ँ, आ, ँ
d) को (KWAA)	+ ँ	= को	क, औ, आ, ँ

Syllabic Cluster with a Functional Vowel Modifier makes another syllabic cluster .

Figure -39 Syllabic Cluster and Functional Vowel Modifier.

Syllabic Cluster	VMCC	Display	Code Sequence
a) क्य(KYA) + ँ		= क्यः(KYA:)	क,ँ,अ,ँ
b) क्वा(KWA) + ँ		= क्वाः(KWA:)	क,ँ,अ,ँ
c) क्वा(KYAA) + ँ		= क्वाः(KYAA:)	क,ँ,आ,ँ
d) क्वा(KWAA) + ँ		= क्वाः(KWAA:)	क,ँ,आ,ँ

Syllabic Cluster with a Functional Vowel Modifier makes another syllabic cluster .

Figure -40 Syllabic Cluster with Functional Vowel Modifier

Syllabic Cluster from Figure 29	FVMCC	Display	Code Sequence
a) क्य + ँ		= क्यँ	क,ँ,अ,ँ,ँ
b) क्वा + ँ		= क्वाँ	क,ँ,अ,ँ,ँ
c) क्वा + ँ		= क्वाँ	क,ँ,आ,ँ,ँ
d) क्वा + ँ		= क्वाँ	क,ँ,आ,ँ,ँ

if YCC or WCC comes after CCC, the CCC will be replaced by YCC or WCC

Figure -41 YCC, WCC and CCC

Bā-ākha:	YCC	Syllabic Cluster	Code Sequence
a) क,क् K + अ(ँ,अ)		= क्य(KYA)	क,ँ,अ
b) क,क् K + अ(ँ,अ)		= क्वा(KYO)	क,ँ,अ
c) न,र् R + अ(ँ,अ)		= र्य (RYA)	न,ँ,अ
d) न,र् R + अ(ँ,अ)		= र्व (RWA)	न,ँ,अ

Annex-III Characters with vowel diacritic

This annex presents characters with vowel diacritic in a tabulated form. The table also represents application of vowel modifier and functional vowel modifier on Bā-ākha:.

	Character with a vowel diacritic						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
K	क _{KA}	का _{KAA}	कि _{KI}	कु _{KU}	के _{KE}	को _{KO}	क॑ _{KA:}	काँ _{KĀ}	काँ _{KĀ:}
KH	ख	खा	खि	खु	खे	खो	ख॑	खँ	खँ
G	ग	गा	गि	गु	गे	गो	ग॑	गँ	गँ
GH	घ	घा	घि	घु	घे	घो	घ॑	घँ	घँ
NG	ङ	ङा	ङि	ङु	ङे	ङो	ङ॑	ङँ	ङँ
NGH	ङ्ख	ङ्खा	ङ्खि	ङ्खु	ङ्खे	ङ्खो	ङ्ख॑	ङ्खँ	ङ्खँ
C	च	चा	चि	चु	चे	चो	च॑	चँ	चँ
CH	छ	छा	छि	छु	छे	छो	छ॑	छँ	छँ
J	ज	जा	जि	जु	जे	जो	ज॑	जँ	जँ
JH	झ	झा	झि	झु	झे	झो	झ॑	झँ	झँ
NJ	ञ	ञा	ञि	ञु	ञे	ञो	ञ॑	ञँ	ञँ
NJH	ञ्झ	ञ्झा	ञ्झि	ञ्झु	ञ्झे	ञ्झो	ञ्झ॑	ञ्झँ	ञ्झँ
T	ट	टा	टि	टु	टे	टो	ट॑	टँ	टँ
TT	ट्ट	ट्टा	ट्टि	ट्टु	ट्टे	ट्टो	ट्ट॑	ट्टँ	ट्टँ
TH	थ	था	थि	थु	थे	थो	थ॑	थँ	थँ

Annex-III Characters with vowel diacritic

This annex presents characters with vowel diacritic in a tabulated form. The table also represents application of vowel modifier and functional vowel modifier on Bā-ākha:.

	Character with a vowel diacritic						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
TTH	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄:
D	ॡ	ॢ	ॣ	।	॥	०	ॡ॥	ॡ̄	ॡ̄:
DD	ॢ	ॣ	।	॥	०	ॠ	ॢ॥	ॢ̄	ॢ̄:
DH	ॣ	।	॥	०	ॠ	ॡ	ॣ॥	ॣ̄	ॣ̄:
DDH	।	॥	०	ॠ	ॡ	ॢ	।॥	।̄	।̄:
N	न _{NA}	ना _{NAA}	नि _{NI}	नु _{NU}	ने _{NE}	नो _{NO}	न॥ _{NA:}	न̄ _{NĀ}	न̄ _{NĀ:}
NN	॥	०	ॠ	ॡ	ॢ	ॣ	॥॥	॥̄	॥̄:
NH	०	ॠ	ॡ	ॢ	ॣ	।	०॥	०̄	०̄:
P	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄:
PH	ॡ	ॢ	ॣ	।	॥	०	ॡ॥	ॡ̄	ॡ̄:
B	ॢ	ॣ	।	॥	०	ॠ	ॢ॥	ॢ̄	ॢ̄:
BH	ॣ	।	॥	०	ॠ	ॡ	ॣ॥	ॣ̄	ॣ̄:
M	।	॥	०	ॠ	ॡ	ॢ	।॥	।̄	।̄:

Annex-III Characters with vowel diacritic

This annex presents characters with vowel diacritic in a tabulated form. The table also represents application of vowel modifier and functional vowel modifier on Bā-ākha:.

	Character with a vowel diacritic						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
MH	𑀓	𑀓𑀭	𑀓𑀲	𑀓𑀮	𑀓𑀴	𑀓𑀶	𑀓𑀭𑀭	𑀓𑀮𑀮	𑀓𑀶𑀶
Y	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
R	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
RH	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
L	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
LH	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
W	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
S	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
SH	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
SS	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶
H	𑀓𑀮	𑀓𑀮𑀭	𑀓𑀮𑀲	𑀓𑀮𑀮	𑀓𑀮𑀴	𑀓𑀮𑀶	𑀓𑀮𑀭𑀭	𑀓𑀮𑀮𑀮	𑀓𑀮𑀶𑀶

Annex-IV Character with I,AI, U,AU with modifier and functional vowel modifier

This annex presents character with diphthong, I & U vowel, nasal and long sound in three different tables.

	Diphthong				I Vowel			U Vowel		
	AI & Nasal Sound		AU & Nasal Sound		Nasal Sound-Long Sound			Nasal Sound -Long Sound		
	A I	ĀI	AU	ĀU	Ī	I:	Ī:	Ū	U:	Ū:
K	कै _{KAI}	कै _{KĀI}	कौ _{KAU}	कौ _{KĀU}	कि _{KĪ}	की _{KI:}	कि _{KĪ:}	कु _{KU}	कु _{KU:}	कु _{KŪ}
KH	खै	खै	खौ	खौ	खि	खी	खि	खु	खु	खु
G	गै	गै	गौ	गौ	गि	गी	गि	गु	गु	गु
GH	घै	घै	घौ	घौ	घि	घी	घि	घु	घु	घु
NG	ङै	ङै	ङौ	ङौ	ङि	ङी	ङि	ङु	ङु	ङु
NGH	ङ्गै	ङ्गै	ङ्गौ	ङ्गौ	ङ्गि	ङ्गी	ङ्गि	ङ्गु	ङ्गु	ङ्गु
C	चै	चै	चौ	चौ	चि	ची	चि	चु	चु	चु
CH	च्है	च्है	च्हौ	च्हौ	च्हि	च्ही	च्हि	च्हु	च्हु	च्हु
J	जै	जै	जौ	जौ	जि	जी	जि	जु	जु	जु
JH	ज्है	ज्है	ज्हौ	ज्हौ	ज्हि	ज्ही	ज्हि	ज्हु	ज्हु	ज्हु
NJ	ञै	ञै	ञौ	ञौ	ञि	ञी	ञि	ञु	ञु	ञु
NJH	ञ्है	ञ्है	ञ्हौ	ञ्हौ	ञ्हि	ञ्ही	ञ्हि	ञ्हु	ञ्हु	ञ्हु
T	तै	तै	तौ	तौ	ति	ती	ति	तु	तु	तु

Annex-IV Character with I,AI, U,AU with modifier and functional vowel modifier

This annex presents character with diphthong, I & U vowel, nasal and long sound in three different tables.

	Diphthong				I Vowel			U Vowel		
	AI & Nasal Sound		AU & Nasal Sound		Nasal Sound–Long Sound			Nasal Sound -Long Sound		
	A I	ĀI	AU	ĀU	ī	I:	Ī:	ū	U:	Ū:
TT	ਟ	ਟੈ	ਟੌ	ਟੌਂ	ਟਿ	ਟੀ	ਟਿੰ	ਟੁ	ਟੂ	ਟੁੰ
TH	ਥ	ਥੈ	ਥੌ	ਥੌਂ	ਥਿ	ਥੀ	ਥਿੰ	ਥੁ	ਥੂ	ਥੁੰ
TTH	ਠ	ਠੈ	ਠੌ	ਠੌਂ	ਠਿ	ਠੀ	ਠਿੰ	ਠੁ	ਠੂ	ਠੁੰ
D	ਦ	ਦੈ	ਦੌ	ਦੌਂ	ਦਿ	ਦੀ	ਦਿੰ	ਦੁ	ਦੂ	ਦੁੰ
DD	ਡ	ਡੈ	ਡੌ	ਡੌਂ	ਡਿ	ਡੀ	ਡਿੰ	ਡੁ	ਡੂ	ਡੁੰ
DH	ਢ _{DHAI}	ਢ _{DH}	ਢੌ _{DHAU}	ਢੌ _{DHĀ}	ਢਿ _{DHĪ}	ਢੀ _{DHII}	ਢਿ _{DHĪ}	ਢੁ _{DHU}	ਢੂ _{DHUU}	ਢੁ _{DHŪ}
DDH	ਡ	ਡੈ	ਡੌ	ਡੌਂ	ਡਿ	ਡੀ	ਡਿੰ	ਡੁ	ਡੂ	ਡੁੰ
N	ਨ	ਨੈ	ਨੌ	ਨੌਂ	ਨਿ	ਨੀ	ਨਿੰ	ਨੁ	ਨੂ	ਨੁੰ
NN	ਣ	ਣੈ	ਣੌ	ਣੌਂ	ਣਿ	ਣੀ	ਣਿੰ	ਣੁ	ਣੂ	ਣੁੰ
NH	ਨੈ	ਨੈਂ	ਨੌਂ	ਨੌਂ	ਨਿੰ	ਨੀਂ	ਨਿੰ	ਨੁੰ	ਨੂਂ	ਨੁੰ
P	ਪ	ਪੈ	ਪੌ	ਪੌਂ	ਪਿ	ਪੀ	ਪਿੰ	ਪੁ	ਪੂ	ਪੁੰ
PH	ਫ	ਫੈ	ਫੌ	ਫੌਂ	ਫਿ	ਫੀ	ਫਿੰ	ਫੁ	ਫੂ	ਫੁੰ
B	ਬ	ਬੈ	ਬੌ	ਬੌਂ	ਬਿ	ਬੀ	ਬਿੰ	ਬੁ	ਬੂ	ਬੁੰ
BH	ਬੈ	ਬੈਂ	ਬੌਂ	ਬੌਂ	ਬਿੰ	ਬੀਂ	ਬਿੰ	ਬੁੰ	ਬੂਂ	ਬੁੰ
M	ਮ	ਮੈ	ਮੌ	ਮੌਂ	ਮਿ	ਮੀ	ਮਿੰ	ਮੁ	ਮੂ	ਮੁੰ

Annex-IV Character with I,AI, U,AU with modifier and functional vowel modifier

This annex presents character with diphthong, I & U vowel, nasal and long sound in three different tables.

	Diphthong				I Vowel			U Vowel		
	AI & Nasal Sound		AU & Nasal Sound		Nasal Sound-Long Sound			Nasal Sound -Long Sound		
	A I	ĀI	AU	ĀU	ī	I:	ī:	ū	U:	ū:
MH	𑖀	𑖁	𑖂	𑖃	𑖄	𑖅	𑖆	𑖇	𑖈	𑖉
Y	𑖊	𑖋	𑖌	𑖍	𑖎	𑖏	𑖐	𑖑	𑖒	𑖓
R	𑖔	𑖕	𑖖	𑖗	𑖘	𑖙	𑖚	𑖛	𑖜	𑖝
RH	𑖞	𑖟	𑖠	𑖡	𑖢	𑖣	𑖤	𑖥	𑖦	𑖧
L	𑖨	𑖩	𑖪	𑖫	𑖬	𑖭	𑖮	𑖯	𑖰	𑖱
LH	𑖲	𑖳	𑖴	𑖵	𑖶	𑖷	𑖸	𑖹	𑖺	𑖻
W	𑖼	𑖽	𑖾	𑖿	𑗀	𑗁	𑗂	𑗃	𑗄	𑗅
S	𑗆	𑗇	𑗈	𑗉	𑗊	𑗋	𑗌	𑗍	𑗎	𑗏
SH	𑗐	𑗑	𑗒	𑗓	𑗔	𑗕	𑗖	𑗗	𑗘	𑗙
SS	𑗚	𑗛	𑗜	𑗝	𑗞	𑗟	𑗠	𑗡	𑗢	𑗣
H	𑗥	𑗦	𑗧	𑗨	𑗩	𑗪	𑗫	𑗬	𑗭	𑗮

Annex-V Clusters

A list of clusters formed by two or more characters is presented with vowel diacritic in a tabulated format. The combination of alphabetic cluster with vowel and modifiers in shaded format is presented in the Annex-V Table 1.

Annex-V Table 1 : Cluster कK with a vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
K	A	AA	I	U	E	O	A:	Ā	Ā:
KK	क KKA	का KKA A	कि KKI	कु KKU	के KKE	को KKO	कः KKA:	काँ KKĀ	काँ KKĀ:

The clusters of characters as presented above in a table format, is also presented from Table 3 onward without roman alphabets.

When diphthong is modified by a vowel modifier then the first vowel is modified.

Clusters with diphthong, vowel modifier and functional vowel modifier are presented below.

Example : KK cluster with diphthong, nasal and long sound diacritic mark.

Annex-V Table 2 : KK Cluster with diphthong, modifier and functional diacritical mark.

K	ĀI	AI:	ĀI:	ĀU	AU:	ĀU:
KK	काँ KKĀI	काँः KKAI:	काँः KKĀI:	काँ KKĀU	काँः KKAU	काँः KKĀU:

Table 3 : Cluster कK with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
K	A	AA	I	U	E	O	A:	Ā	Ā:
KK	क KKA	का KKA A	कि KKI	कु KKU	के KKE	को KKO	कः KKA:	काँ KKĀ	काँ KKĀ:
KKH	ख	खा	खि	खु	खे	खो	खः	खाँ	खाँ
KG	ग	गा	गि	गु	गे	गो	गः	गाँ	गाँ
KGH	ग़	गा	ग़ि	ग़ु	ग़े	ग़ो	ग़ः	गाँ	गाँ
KNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङाँ	ङाँ
KC	च	चा	चि	चु	चे	चो	चः	चाँ	चाँ
KCH	छ	छा	छि	छु	छे	छो	छः	छाँ	छाँ
KJ	ज	जा	जि	जु	जे	जो	जः	जाँ	जाँ
KJH	झ	झा	झि	झु	झे	झो	झः	झाँ	झाँ
KNJ	ञ	जा	जि	जु	जे	जो	जः	जाँ	जाँ
KT	क	का	कि	कु	के	को	कः	काँ	काँ
KTT	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठाँ	ठाँ
KTH	क	का	कि	कु	के	को	कः	काँ	काँ
KTTH	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठाँ	ठाँ

Table 3 : Cluster कK with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
K	A	AA	I	U	E	O	A:	Ā	Ā:
KD	क	का	कि	कु	के	को	कः	कं	कं
KDD	क	का	कि	कु	के	को	कः	कं	कं
KDH	क	का	कि	कु	के	को	कः	कं	कं
KDDH	क	का	कि	कु	के	को	कः	कं	कं
KN	क	का	कि	कु	के	को	कः	कं	कं
KNN	क	का	कि	कु	के	को	कः	कं	कं
KP	क	का	कि	कु	के	को	कः	कं	कं
KPH	क	का	कि	कु	के	को	कः	कं	कं
KB	क	का	कि	कु	के	को	कः	कं	कं
KBH	क	का	कि	कु	के	को	कः	कं	कं
KM	क	का	कि	कु	के	को	कः	कं	कं
KY	क	का	कि	कु	के	को	कः	कं	कं
KR	क	का	कि	कु	के	को	कः	कं	कं

Table 3 : Cluster कK with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
K	A	AA	I	U	E	O	A:	Ā	Ā:
KL	क	का	कि	कु	के	को	कः	कं	कं
KW	क	का	कि	कु	के	को	कः	कं	कं
KS	क	का	कि	कु	के	को	कः	कं	कं
KSH	क	का	कि	कु	के	को	कः	कं	कं
KSS	क	का	कि	कु	के	को	कः	कं	कं

Table 4 : Cluster ख KH with vowel, nasal and long sound diacritical marks

Character KH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
KHK	ख KHK A	खा KHK AA	खि KHK I	खु KHK U	खे KHK E	खो KHK O	खः KHK A:	खं KHK Ā	खं KHK Ā:
KHH	ख्	खा	खि	खु	खे	खो	खः	खं	खं
KHG	ग	गा	गि	गु	गे	गो	गः	गं	गं
KHGH	ग्	गा	गि	गु	गे	गो	गः	गं	गं
KHNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङं
KHC	च	चा	चि	चु	चे	चो	चः	चं	चं
KHCH	च्	चा	चि	चु	चे	चो	चः	चं	चं
KHJ	ज	जा	जि	जु	जे	जो	जः	जं	जं
KHJH	ज्	जा	जि	जु	जे	जो	जः	जं	जं
KHNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जं
KHT	ट	टा	टि	टु	टे	टो	टः	टं	टं
KHTT	ट्	टा	टि	टु	टे	टो	टः	टं	टं
KHTH	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठं
KHTTH	ठ्	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठं

Table 4 : Cluster མ KH with vowel, nasal and long sound diacritical marks

Character KH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
KHD	མ	མ་	མི	མུ	མེ	མོ	མུམ	མུྂ	མུྂ
KHDD	མུ	མུ་	མུམི	མུམུ	མུམེ	མུམོ	མུམུམ	མུམུྂ	མུམུྂ
	KHDDA	KHDDAA	KHDDI	KHDDU	KHDD E	KHDDO	KHDDA:	KHDDĀ	KHDDĀ:
KHDH	མྱ	མྱ་	མྱི	མྱུ	མྱེ	མྱོ	མྱུམ	མྱུྂ	མྱུྂ
KHDDH	མུྱ	མུྱ་	མུྱི	མུྱུ	མུྱེ	མུྱོ	མུྱུམ	མུྱུྂ	མུྱུྂ
KHN	མྲ	མྲ་	མྲི	མྲུ	མྲེ	མྲོ	མྲུམ	མྲུྂ	མྲུྂ
KHNN	མྲྀ	མྲྀ་	མྲྀམི	མྲྀུ	མྲྀེ	མྲྀོ	མྲྀུམ	མྲྀུྂ	མྲྀུྂ
KHP	མཡ	མཡ་	མཡི	མཡུ	མཡེ	མཡོ	མཡུམ	མཡུྂ	མཡུྂ
KHPH	མཱ	མཱ་	མཱི	མཱུ	མཱེ	མཱོ	མཱུམ	མཱུྂ	མཱུྂ
KHB	མེ	མེ་	མེམི	མེུ	མེེ	མེོ	མེུམ	མེུྂ	མེུྂ
KHBH	མེྱ	མེྱ་	མེྱི	མེྱུ	མེྱེ	མེྱོ	མེྱུམ	མེྱུྂ	མེྱུྂ
KHM	མམ	མམ་	མམི	མམུ	མམེ	མམོ	མམུམ	མམུྂ	མམུྂ
KHY	མལ	མལ་	མལི	མལུ	མལེ	མལོ	མལུམ	མལུྂ	མལུྂ
KHR	མར	མར་	མརི	མརུ	མརེ	མརོ	མརུམ	མརུྂ	མརུྂ

Table 4 : Cluster ख KH with vowel, nasal and long sound diacritical marks

Character KH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
KHL	ख	खा	खि	खु	खे	खो	खः	खँ	खं
KHW	ख	खा	खि	खु	खे	खो	खः	खँ	खं
KHS	खा	खा	खि	खु	खे	खो	खः	खँ	खं
KHSH	ख	खा	खि	खु	खे	खो	खः	खँ	खं
KHSS	खा	खा	खि	खु	खे	खो	खः	खँ	खं

Table 5 : Cluster ଗ G with vowel, nasal and long sound diacritical marks

Character G	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
GK	କ GKA	କା GKAA	କି GKI	କୁ GKU	କେ GKE	କୋ GKO	କଃ GKA:	କଂ GKĀ	କଂ GKĀ:
GKH	ଖ	ଖା	ଖି	ଖୁ	ଖେ	ଖୋ	ଖଃ	ଖଂ	ଖଂ
GG	ଗ	ଗା	ଗି	ଗୁ	ଗେ	ଗୋ	ଗଃ	ଗଂ	ଗଂ
GGH	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘଂ	ଘଂ
GNG	ଙ	ଙା	ଙି	ଙୁ	ଙେ	ଙୋ	ଙଃ	ଙଂ	ଙଂ
GC	ଚ	ଚା	ଚି	ଚୁ	ଚେ	ଚୋ	ଚଃ	ଚଂ	ଚଂ
GCH	ଛ	ଛା	ଛି	ଛୁ	ଛେ	ଛୋ	ଛଃ	ଛଂ	ଛଂ
GJ	ଜ	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
GJH	ଝ	ଝା	ଝି	ଝୁ	ଝେ	ଝୋ	ଝଃ	ଝଂ	ଝଂ
GNJ	ଞ	ଞା	ଞି	ଞୁ	ଞେ	ଞୋ	ଞଃ	ଞଂ	ଞଂ
GT	ଟ	ଟା	ଟି	ଟୁ	ଟେ	ଟୋ	ଟଃ	ଟଂ	ଟଂ
GTT	ଠ	ଠା	ଠି	ଠୁ	ଠେ	ଠୋ	ଠଃ	ଠଂ	ଠଂ
GTH	ଡ	ଡା	ଡି	ଡୁ	ଡେ	ଡୋ	ଡଃ	ଡଂ	ଡଂ
GTTH	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢଂ	ଢଂ

Table 5 : Cluster ଗ G with vowel, nasal and long sound diacritical marks

Character G	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
GD	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GDD	ଘ GDDA	ଘା GDDAA	ଘି GDDI	ଘୁ GDDU	ଘେ GDDE	ଘୋ GDDO	ଘଃ GDDA:	ଘ̃ GDDĀ	ଘ̃: GDDĀ:
GDH	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GDDH	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GN	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GNN	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GP	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GPH	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GB	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GBH	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GM	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GY	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
GR	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:

Table 5 : Cluster ଗ G with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
G	A	AA	I	U	E	O	A:	Â	Ã:
GL	ଗ	ଗା	ଗି	ଗୁ	ଗେ	ଗୋ	ଗଃ	ଗଂ	ଗଂ
GW	ଗ	ଗା	ଗି	ଗୁ	ଗେ	ଗୋ	ଗଃ	ଗଂ	ଗଂ
GS	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘଂ	ଘଂ
GSH	ଗ	ଗା	ଗି	ଗୁ	ଗେ	ଗୋ	ଗଃ	ଗଂ	ଗଂ
GSS	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘଂ	ଘଂ

Table 6 : Cluster घ GHwith vowel, nasal and long sound diacritical marks

Character GH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
GHK	क GHKA	का GHKAA	कि GHKI	कु GHKU	के GHKE	को GHKO	कः GHKA:	काँ GHKĀ	काँ GHKĀ:
GHKH	खा GHKHA	खा GHKHA	खि GHKHI	खु GHKHU	खे GHKHE	खो GHKHO	खः GHKHA:	खाँ GHKHĀ	खाँ GHKHĀ:
GHG	ग GHGA	गा GHGAA	गि GHGI	गु GHGU	गे GHGE	गो GHGO	गः GHGA:	गाँ GHGĀ	गाँ GHGĀ:
GHGH	घ GHGHA	घा GHGHAA	घि GHGHI	घु GHGHU	घे GHGHE	घो GHGHO	घः GHGHA:	घाँ GHGHĀ	घाँ GHGHĀ:
GHNG	ङ GHNGA	ङा GHNGAA	ङि GHNGI	ङु GHNGU	ङे GHNGE	ङो GHNGO	ङः GHNGA:	ङाँ GHNGĀ	ङाँ GHNGĀ:
GHCH	च GHCHA	चा GHCHAA	चि GHCHI	चु GHCHU	चे GHCHE	चो GHCHO	चः GHCHA:	चाँ GHCHĀ	चाँ GHCHĀ:
GHJ	ज GHJA	जा GHJAA	जि GHJI	जु GHJU	जे GHJE	जो GHJO	जः GHJA:	जाँ GHJĀ	जाँ GHJĀ:
GHJH	झ GHJHA	झा GHJHAA	झि GHJHI	झु GHJHU	झे GHJHE	झो GHJHO	झः GHJHA:	झाँ GHJHĀ	झाँ GHJHĀ:
GHNJ	ञ GHNJA	जा GHNJAA	जि GHNJI	जु GHNJU	जे GHNJE	जो GHNJO	जः GHNJA:	जाँ GHNJĀ	जाँ GHNJĀ:
GHT	ट GHTA	टा GHTAA	टि GHTI	टु GHTU	टे GHTE	टो GHTO	टः GHTA:	टाँ GHTĀ	टाँ GHTĀ:
GHTT	ठ GHTTA	ठा GHTTAA	ठि GHTTI	ठु GHTTU	ठे GHTTE	ठो GHTTO	ठः GHTTA:	ठाँ GHTTĀ	ठाँ GHTTĀ:
GHTH	ड GHTHA	डा GHTHAA	डि GHTHI	डु GHTHU	डे GHTHE	डो GHTHO	डः GHTHA:	डाँ GHTHĀ	डाँ GHTHĀ:
GHTTH	ढ GHTTHA	ढा GHTTHAA	ढि GHTTHI	ढु GHTTHU	ढे GHTTHE	ढो GHTTHO	ढः GHTTHA:	ढाँ GHTTHĀ	ढाँ GHTTHĀ:

Table 6 : Cluster घ GHwith vowel, nasal and long sound diacritical marks

Character GH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
GHD	घृ	घ्रा	घ्रि	घ्रु	घ्रे	घ्रो	घृ१	घ्रँ	घ्रं
GHDD	घु	घ्वा	घ्वि	घ्वु	घ्वे	घ्वो	घु१	घुँ	घुं
	GHDDA	GHDDAA	GHDDI	GHDDU	GHDD E	GHDD O	GHDDA:	GHDDĀ	GHDDĀ:
GHDH	घ्व	घ्वा	घ्वि	घ्वु	घ्वे	घ्वो	घ्व१	घ्वँ	घ्वं
GHDDH	घु	घ्वा	घ्वि	घ्वु	घ्वे	घ्वो	घु१	घुँ	घुं
GHN	घ्न	घ्ना	घ्नि	घ्नु	घ्ने	घ्नो	घ्न१	घ्नँ	घ्नं
GHNN	घु	घ्वा	घ्वि	घ्वु	घ्वे	घ्वो	घु१	घुँ	घुं
GHP	घ्य	घ्या	घ्यि	घ्यु	घ्ये	घ्यो	घ्य१	घ्यँ	घ्यं
GHPH	घू	घ्वा	घ्वि	घ्वु	घ्वे	घ्वो	घू१	घूँ	घूं
GHB	घ	घ्रा	घ्रि	घ्रु	घ्रे	घ्रो	घ१	घ्रँ	घ्रं
GHBH	घ	घ्रा	घ्रि	घ्रु	घ्रे	घ्रो	घ१	घ्रँ	घ्रं
GHM	घम	घ्मा	घ्मि	घ्मु	घ्मे	घ्मो	घम१	घमँ	घमं
GHY	घय	घ्या	घ्यि	घ्यु	घ्ये	घ्यो	घय१	घयँ	घयं
GHR	घ्र	घ्रा	घ्रि	घ्रु	घ्रे	घ्रो	घ्र१	घ्रँ	घ्रं

Table 6 : Cluster घ GHwith vowel, nasal and long sound diacritical marks

Character GH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
GHL	घ	घा	घि	घु	घे	घो	घः	घँ	घं
GHW	घ	घा	घि	घु	घे	घो	घः	घँ	घं
GHS	घ	घा	घि	घु	घे	घो	घः	घँ	घं
GHSN	घ	घा	घि	घु	घे	घो	घः	घँ	घं
GHSN	घ	घा	घि	घु	घे	घो	घः	घँ	घं

Table 7 : Cluster ࠔ NG with vowel, nasal and long sound diacritical marks

Character NG	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
NGK	𑖕 NGKA	𑖕𑖢 NGKAA	𑖕𑖳 NGKI	𑖕𑖴 NGKU	𑖕𑖶 NGKE	𑖕𑖷 NGKO	𑖕𑖹 NGKA:	𑖕𑖺 NGKĀ	𑖕𑖻 NGKĀ:
NGKH	𑖕𑖻	𑖕𑖻𑖢	𑖕𑖻𑖳	𑖕𑖻𑖴	𑖕𑖻𑖶	𑖕𑖻𑖷	𑖕𑖻𑖹	𑖕𑖻𑖺	𑖕𑖻𑖻
NGG	𑖕𑖴	𑖕𑖴𑖢	𑖕𑖴𑖳	𑖕𑖴𑖴	𑖕𑖴𑖶	𑖕𑖴𑖷	𑖕𑖴𑖹	𑖕𑖴𑖺	𑖕𑖴𑖻
NGGH	𑖕𑖶	𑖕𑖶𑖢	𑖕𑖶𑖳	𑖕𑖶𑖴	𑖕𑖶𑖶	𑖕𑖶𑖷	𑖕𑖶𑖹	𑖕𑖶𑖺	𑖕𑖶𑖻
NGNG	𑖕𑖷	𑖕𑖷𑖢	𑖕𑖷𑖳	𑖕𑖷𑖴	𑖕𑖷𑖶	𑖕𑖷𑖷	𑖕𑖷𑖹	𑖕𑖷𑖺	𑖕𑖷𑖻
NGC	𑖕𑖸	𑖕𑖸𑖢	𑖕𑖸𑖳	𑖕𑖸𑖴	𑖕𑖸𑖶	𑖕𑖸𑖷	𑖕𑖸𑖹	𑖕𑖸𑖺	𑖕𑖸𑖻
NGCH	𑖕𑖹	𑖕𑖹𑖢	𑖕𑖹𑖳	𑖕𑖹𑖴	𑖕𑖹𑖶	𑖕𑖹𑖷	𑖕𑖹𑖹	𑖕𑖹𑖺	𑖕𑖹𑖻
NGJ	𑖕𑖺	𑖕𑖺𑖢	𑖕𑖺𑖳	𑖕𑖺𑖴	𑖕𑖺𑖶	𑖕𑖺𑖷	𑖕𑖺𑖹	𑖕𑖺𑖺	𑖕𑖺𑖻
NGJH	𑖕𑖻	𑖕𑖻𑖢	𑖕𑖻𑖳	𑖕𑖻𑖴	𑖕𑖻𑖶	𑖕𑖻𑖷	𑖕𑖻𑖹	𑖕𑖻𑖺	𑖕𑖻𑖻
NGNJ	𑖕𑖼	𑖕𑖼𑖢	𑖕𑖼𑖳	𑖕𑖼𑖴	𑖕𑖼𑖶	𑖕𑖼𑖷	𑖕𑖼𑖹	𑖕𑖼𑖺	𑖕𑖼𑖻
NGT	𑖕𑖽	𑖕𑖽𑖢	𑖕𑖽𑖳	𑖕𑖽𑖴	𑖕𑖽𑖶	𑖕𑖽𑖷	𑖕𑖽𑖹	𑖕𑖽𑖺	𑖕𑖽𑖻
NGTT	𑖕𑖾	𑖕𑖾𑖢	𑖕𑖾𑖳	𑖕𑖾𑖴	𑖕𑖾𑖶	𑖕𑖾𑖷	𑖕𑖾𑖹	𑖕𑖾𑖺	𑖕𑖾𑖻
NGTH	𑖕𑖿	𑖕𑖿𑖢	𑖕𑖿𑖳	𑖕𑖿𑖴	𑖕𑖿𑖶	𑖕𑖿𑖷	𑖕𑖿𑖹	𑖕𑖿𑖺	𑖕𑖿𑖻
NGTTH	𑖕𑖿	𑖕𑖿𑖢	𑖕𑖿𑖳	𑖕𑖿𑖴	𑖕𑖿𑖶	𑖕𑖿𑖷	𑖕𑖿𑖹	𑖕𑖿𑖺	𑖕𑖿𑖻

Table 7 : Cluster ଢ NG with vowel, nasal and long sound diacritical marks

Character NG	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
NGD	ଦ୍ର	ଦ୍ରା	ଦ୍ରି	ଦ୍ରୁ	ଦ୍ରେ	ଦ୍ରୋ	ଦ୍ରଃ	ଦ୍ର̃	ଦ୍ର̃:
NGDD	ଦ୍ର	ଦ୍ରା	ଦ୍ରି	ଦ୍ରୁ	ଦ୍ରେ	ଦ୍ରୋ	ଦ୍ରଃ	ଦ୍ର̃	ଦ୍ର̃:
NGDH	ଦ୍ର NGDHA	ଦ୍ରା NGDHAA	ଦ୍ରି NGDHI	ଦ୍ରୁ NGDHU	ଦ୍ରେ NGDHE	ଦ୍ରୋ NGDHO	ଦ୍ରଃ NGDH:	ଦ୍ର̃ NGDHĀ	ଦ୍ର̃ NGDHĀ:
NGDDH	ଦ୍ର	ଦ୍ରା	ଦ୍ରି	ଦ୍ରୁ	ଦ୍ରେ	ଦ୍ରୋ	ଦ୍ରଃ	ଦ୍ର̃	ଦ୍ର̃:
NGN	ନ୍ନ	ନ୍ନା	ନ୍ନି	ନ୍ନୁ	ନ୍ନେ	ନ୍ନୋ	ନ୍ନଃ	ନ୍ନ̃	ନ୍ନ̃:
NGNN	ନ୍ନ	ନ୍ନା	ନ୍ନି	ନ୍ନୁ	ନ୍ନେ	ନ୍ନୋ	ନ୍ନଃ	ନ୍ନ̃	ନ୍ନ̃:
NGP	ଦ୍ଵ	ଦ୍ଵା	ଦ୍ଵି	ଦ୍ଵୁ	ଦ୍ଵେ	ଦ୍ଵୋ	ଦ୍ଵଃ	ଦ୍ଵ̃	ଦ୍ଵ̃:
NGPH	ଦ୍ଵ	ଦ୍ଵା	ଦ୍ଵି	ଦ୍ଵୁ	ଦ୍ଵେ	ଦ୍ଵୋ	ଦ୍ଵଃ	ଦ୍ଵ̃	ଦ୍ଵ̃:
NGB	ଦ୍ଵ	ଦ୍ଵା	ଦ୍ଵି	ଦ୍ଵୁ	ଦ୍ଵେ	ଦ୍ଵୋ	ଦ୍ଵଃ	ଦ୍ଵ̃	ଦ୍ଵ̃:
NGBH	ଦ୍ଵ	ଦ୍ଵା	ଦ୍ଵି	ଦ୍ଵୁ	ଦ୍ଵେ	ଦ୍ଵୋ	ଦ୍ଵଃ	ଦ୍ଵ̃	ଦ୍ଵ̃:
NGM	ଦ୍ଵ	ଦ୍ଵା	ଦ୍ଵି	ଦ୍ଵୁ	ଦ୍ଵେ	ଦ୍ଵୋ	ଦ୍ଵଃ	ଦ୍ଵ̃	ଦ୍ଵ̃:
NGY	ଦ୍ଵ	ଦ୍ଵା	ଦ୍ଵି	ଦ୍ଵୁ	ଦ୍ଵେ	ଦ୍ଵୋ	ଦ୍ଵଃ	ଦ୍ଵ̃	ଦ୍ଵ̃:
NGR	ଦ୍ଵ	ଦ୍ଵା	ଦ୍ଵି	ଦ୍ଵୁ	ଦ୍ଵେ	ଦ୍ଵୋ	ଦ୍ଵଃ	ଦ୍ଵ̃	ଦ୍ଵ̃:

Table 7 : Cluster ெ NG with vowel, nasal and long sound diacritical marks

Character NG	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A:	Ā	Ī	Ū	Ē	Ō	A:	Ā	Ā:
NGL	ஊ	ஶா	ஶி	ஶு	ஶீ	ஶா	ஊஃ	ஶீ	ஶீ
NGW	ஊ	ஶா	ஶி	ஶு	ஶீ	ஶா	ஊஃ	ஶீ	ஶீ
NGS	ஶா	ஶா	ஶி	ஶு	ஶீ	ஶா	ஶாஃ	ஶீ	ஶீ
NGSH	ஊ	ஶா	ஶி	ஶு	ஶீ	ஶா	ஊஃ	ஶீ	ஶீ
NGSS	ஶா	ஶா	ஶி	ஶு	ஶீ	ஶா	ஶாஃ	ஶீ	ஶீ

Table 8 : Cluster च C with vowel, nasal and long sound diacritical marks

Character C	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
CK	क CKA	का CKAA	कि CKI	कु CKU	के CKE	को CKO	कः CKA:	कं CKĀ	कं CKĀ:
CKH	चा	चा	चि	चु	चे	चो	चः	चं	चं
CG	ज	जा	जि	जु	जे	जो	जः	जं	जं
CGH	घ	घा	घि	घु	घे	घो	घः	घं	घं
CNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङं
CC	च	चा	चि	चु	चे	चो	चः	चं	चं
CCH	छ	छा	छि	छु	छे	छो	छः	छं	छं
CJ	जु	जा	जि	जु	जे	जो	जः	जं	जं
CJH	चा	चा	चि	चु	चे	चो	चः	चं	चं
CNJ	जु	जा	जि	जु	जे	जो	जः	जं	जं
CT	क	का	कि	कु	के	को	कः	कं	कं
CTT	कु	कु	कु	कु	कु	कु	कुः	कुं	कुं
CTH	क	का	कि	कु	के	को	कः	कं	कं
CTTH	क	का	कि	कु	के	को	कः	कं	कं

Table 8 : Cluster च C with vowel, nasal and long sound diacritical marks

Character C	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
CD	च	चा	चि	चु	चे	चो	चः	चं	चं
CDD	चु	चा	चि	चु	चे	चो	चः	चं	चं
CDH	च	चा	चि	चु	चे	चो	चः	चं	चं
CDDH	चु CDDHA	चा CDDHAA	चि CDDHI	चु CDDHU	चे CDDHE	चो CDDHO	चुः CDDHA:	चुं CDDHĀ	चुं CDDHĀ:
CN	च	चा	चि	चु	चे	चो	चः	चं	चं
CNN	च	चा	चि	चु	चे	चो	चः	चं	चं
CP	च	चा	चि	चु	चे	चो	चः	चं	चं
CPH	च	चा	चि	चु	चे	चो	चः	चं	चं
CB	च	चा	चि	चु	चे	चो	चः	चं	चं
CBH	च	चा	चि	चु	चे	चो	चः	चं	चं
CM	च	चा	चि	चु	चे	चो	चः	चं	चं
CY	च	चा	चि	चु	चे	चो	चः	चं	चं
CR	च	चा	चि	चु	चे	चो	चः	चं	चं

Table 8 : Cluster व C with vowel, nasal and long sound diacritical marks

Character C	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
CL	व	वा	वि	वु	वे	वो	वः	वँ	वं
CW	व	वा	वि	वु	वे	वो	वः	वँ	वं
CS	व्य	व्या	व्यि	व्यु	व्ये	व्यो	व्यः	व्यँ	व्यं
CSH	व	वा	वि	वु	वे	वो	वः	वँ	वं
CSS	व्य	व्या	व्यि	व्यु	व्ये	व्यो	व्यः	व्यँ	व्यं

Table 9 : Cluster ऋCH with vowel, nasal and long sound diacritical marks

Character CH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
CHK	क CHKA	का CHKAA	कि CHKI	कु CHKU	के CHKE	को CHKO	कः CHKA:	कं CHKĀ	कः CHKĀ:
CHKH	क़	का़	कि़	कु़	के़	को़	क़ः	क़ं	क़ः
CHG	ग	गा	गि	गु	गे	गो	गः	गं	गः
CHGH	ग़	गा़	गि़	गु़	गे़	गो़	ग़ः	ग़ं	ग़ः
CHNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङः
CHC	च	चा	चि	चु	चे	चो	चः	चं	चः
CHCH	च़	चा़	चि़	चु़	चे़	चो़	च़ः	च़ं	च़ः
CHJ	ज	जा	जि	जु	जे	जो	जः	जं	जः
CHJH	ज़	जा़	जि़	जु़	जे़	जो़	ज़ः	ज़ं	ज़ः
CHNJ	ञ	जा	जि	जु	जे	जो	ञः	ञं	ञः
CHT	ट	टा	टि	टु	टे	टो	टः	टं	टः
CHTT	ट़	टा़	टि़	टु़	टे़	टो़	ट़ः	ट़ं	ट़ः
CHTH	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठः
CHTTH	ठ़	ठा़	ठि़	ठु़	ठे़	ठो़	ठ़ः	ठ़ं	ठ़ः

Table 9 : Cluster ୱCH with vowel, nasal and long sound diacritical marks

Character CH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
CHD	କୃ	କ୍ୱା	କ୍ୱି	କୂ	କୈ	କୌ	କୃଃ	କୂଁ	କୃଁ
CHDD	କୃ	କ୍ୱା	କ୍ୱି	କୂ	କୈ	କୌ	କୃଃ	କୂଁ	କୃଁ
	CHDDA	CHDDAA	CHDDI	CHDDU	CHDD E	CHDDO	CHDDA:	CHDDĀ	CHDDĀ:
CHDH	କ୍ୱ	କ୍ୱା	କ୍ୱି	କ୍ୂ	କ୍ୱେ	କ୍ୱୌ	କ୍ୱଃ	କ୍ୱଁ	କ୍ୱଁ
CHDDH	କୃ	କ୍ୱା	କ୍ୱି	କୂ	କୈ	କୌ	କୃଃ	କୂଁ	କୃଁ
CHN	କ୍ଳ	କ୍ଳା	କ୍ଳି	କ୍ଳୁ	କ୍ଳେ	କ୍ଳୌ	କ୍ଳଃ	କ୍ଳଁ	କ୍ଳଁ
CHNN	କ୍ଳ	କ୍ଳା	କ୍ଳି	କ୍ଳୁ	କ୍ଳେ	କ୍ଳୌ	କ୍ଳଃ	କ୍ଳଁ	କ୍ଳଁ
CHP	କ୍ପ	କ୍ପା	କ୍ପି	କ୍ପୁ	କ୍ପେ	କ୍ପୌ	କ୍ପଃ	କ୍ପଁ	କ୍ପଁ
CHPH	କ୍ଳ	କ୍ଳା	କ୍ଳି	କ୍ଳୁ	କ୍ଳେ	କ୍ଳୌ	କ୍ଳଃ	କ୍ଳଁ	କ୍ଳଁ
CHB	କ୍ବ	କ୍ବା	କ୍ବି	କ୍ବୁ	କ୍ବେ	କ୍ବୌ	କ୍ବଃ	କ୍ବଁ	କ୍ବଁ
CHBH	କ୍ବ	କ୍ବା	କ୍ବି	କ୍ବୁ	କ୍ବେ	କ୍ବୌ	କ୍ବଃ	କ୍ବଁ	କ୍ବଁ
CHM	କ୍ମ	କ୍ମା	କ୍ମି	କ୍ମୁ	କ୍ମେ	କ୍ମୌ	କ୍ମଃ	କ୍ମଁ	କ୍ମଁ
CHY	କ୍ଯ	କ୍ଯା	କ୍ଯି	କ୍ଯୁ	କ୍ଯେ	କ୍ଯୌ	କ୍ଯଃ	କ୍ଯଁ	କ୍ଯଁ
CHR	କ୍ୱ	କ୍ୱା	କ୍ୱି	କ୍ବୁ	କ୍ବେ	କ୍ବୌ	କ୍ବଃ	କ୍ବଁ	କ୍ବଁ

Table 9 : Cluster ്CH with vowel, nasal and long sound diacritical marks

Character CH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
CHL	കു	കാ	കി	കു	കെ	കോ	കുഃ	കു്	കുഃ
CHW	കു	കാ	കി	കു	കെ	കോ	കുഃ	കു്	കുഃ
CHS	ക്ഷ	ക്ഷാ	ക്ഷി	ക്ഷു	ക്ഷെ	ക്ഷോ	ക്ഷഃ	ക്ഷ്	ക്ഷഃ
CHSH	കു	കാ	കി	കു	കെ	കോ	കുഃ	കു്	കുഃ
CHSS	ക്ഷ	ക്ഷാ	ക്ഷി	ക്ഷു	ക്ഷെ	ക്ഷോ	ക്ഷഃ	ക്ഷ്	ക്ഷഃ
CHH	കു	കാ	കി	കു	കെ	കോ	കുഃ	കു്	കുഃ

Table 10 : Cluster ञ J with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
J	A	AA	I	U	E	O	A:	Ā	Ā:
JK	का JKA	का JKAA	कि JKI	कु JKU	के JKE	को JKO	कः JKA:	काँ JKĀ	काँ JKĀ:
JKH	क़	का	कि	कु	के	को	क़ः	क़ाँ	क़ाँ
JG	गा	गा	गि	गु	गे	गो	गः	गाँ	गाँ
JGH	ग़	गा	गि	गु	गे	गो	ग़ः	ग़ाँ	ग़ाँ
JNG	ङा	ङा	ङि	ङु	ङे	ङो	ङः	ङाँ	ङाँ
JC	चा	चा	चि	चु	चे	चो	चः	चाँ	चाँ
JCH	च़	चा	चि	चु	चे	चो	च़ः	च़ाँ	च़ाँ
JJ	जा	जा	जि	जु	जे	जो	जः	जाँ	जाँ
JJH	ज़	जा	जि	जु	जे	जो	ज़ः	ज़ाँ	ज़ाँ
JNJ	झा	झा	झि	झु	झे	झो	झः	झाँ	झाँ
JT	ठा	ठा	ठि	ठु	ठे	ठो	ठः	ठाँ	ठाँ
JTT	ठ़	ठा	ठि	ठु	ठे	ठो	ठ़ः	ठ़ाँ	ठ़ाँ
JTH	ढा	ढा	ढि	ढु	ढे	ढो	ढः	ढाँ	ढाँ
JTTH	ढ़	ढा	ढि	ढु	ढे	ढो	ढ़ः	ढ़ाँ	ढ़ाँ

Table 10 : Cluster ଜ J with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
J	A	AA	I	U	E	O	A:	Â	Ã:
JD	ଜ	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JDD	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JDH	ଜା JDHA	ଜା JDHAA	ଜି JDHI	ଜୁ JDHU	ଜେ JDHE	ଜୋ JDHO	ଜାଃ JDHA:	ଜାଂ JDHÂ	ଜାଂ JDHÃ:
JDDH	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JN	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JNN	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JP	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JPH	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JB	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JBH	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JM	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JY	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ
JR	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜଃ	ଜଂ	ଜଂ

Table 10 : Cluster ଜ J with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
J	A	AA	I	U	E	O	A:	Â	Ã:
JL	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜାଃ	ଜାଂ	ଜାଂ
JW	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜାଃ	ଜାଂ	ଜାଂ
JS	ଜ୍ଞ	ଜ୍ଞା	ଜ୍ଞି	ଜ୍ଞୁ	ଜ୍ଞେ	ଜ୍ଞୋ	ଜ୍ଞାଃ	ଜ୍ଞାଂ	ଜ୍ଞାଂ
JSH	ଜା	ଜା	ଜି	ଜୁ	ଜେ	ଜୋ	ଜାଃ	ଜାଂ	ଜାଂ
JSS	ଜ୍ଞ	ଜ୍ଞା	ଜ୍ଞି	ଜ୍ଞୁ	ଜ୍ଞେ	ଜ୍ଞୋ	ଜ୍ଞାଃ	ଜ୍ଞାଂ	ଜ୍ଞାଂ

Annex-V_Cluster_JH Table 11 : Cluster ऋ JH with vowel, nasal and long sound diacritical marks

Character JH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	A	A:
JHK	क JHKA	का JHKAA	कि JHKI	कु JHKU	के JHKE	को JHKO	कः JHKA:	कं JHKA	कं JHKA:
JHKH	ख	खा	खि	खु	खे	खो	खः	खं	खं
JHG	ग	गा	गि	गु	गे	गो	गः	गं	गं
JHGH	घ	घा	घि	घु	घे	घो	घः	घं	घं
JHNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङं
JHC	च	चा	चि	चु	चे	चो	चः	चं	चं
JHCH	छ	छा	छि	छु	छे	छो	छः	छं	छं
JHJ	ज	जा	जि	जु	जे	जो	जः	जं	जं
JHJH	झ	झा	झि	झु	झे	झो	झः	झं	झं
JHNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जं
JHT	ट	टा	टि	टु	टे	टो	टः	टं	टं
JHTT	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठं
JHTH	ड	डा	डि	डु	डे	डो	डः	डं	डं
JHTTH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढं	ढं
JHD	ट्र	ट्रा	ट्रि	ट्रु	ट्रे	ट्रो	ट्रः	ट्रं	ट्रं
JHDD	ड्र	ड्रा	ड्रि	ड्रु	ड्रे	ड्रो	ड्रः	ड्रं	ड्रं

	A	AA	I	U	E	O	A:	A	A:
JHDH	ସ JHDHA	ସା JHDHAA	ସି JHDHI	ସୁ JHDHU	ସେ JHDHE	ସୋ JHDHO	ସଃ JHDHA:	ସ୍ JHDHA	ସ୍ JHDHA:
JHDDH	ଡୁ	ଡା	ଡି	ଡୁ	ଡେ	ଡୋ	ଡଃ	ଡ୍	ଡ୍
JHN	ନ	ନା	ନି	ନୁ	ନେ	ନୋ	ନଃ	ନ୍	ନ୍
JHNN	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲ୍	ଲ୍
JHP	ପ	ପା	ପି	ପୁ	ପେ	ପୋ	ପଃ	ପ୍	ପ୍
JHPH	ଫୁ	ଫା	ଫି	ଫୁ	ଫେ	ଫୋ	ଫଃ	ଫ୍	ଫ୍
JHB	ବ	ବା	ବି	ବୁ	ବେ	ବୋ	ବଃ	ବ୍	ବ୍
JHBH	ହ	ହା	ହି	ହୁ	ହେ	ହୋ	ହଃ	ହ୍	ହ୍
JHM	ମ	ମା	ମି	ମୁ	ମେ	ମୋ	ମଃ	ମ୍	ମ୍
JHY	ଯ	ଯା	ଯି	ଯୁ	ଯେ	ଯୋ	ଯଃ	ଯ୍	ଯ୍
JHR	ର	ରା	ରି	ରୁ	ରେ	ରୋ	ରଃ	ର୍	ର୍
JHL	ଳ	ଳା	ଳି	ଳୁ	ଳେ	ଳୋ	ଳଃ	ଳ୍	ଳ୍
JHW	ଞ	ଞା	ଞି	ଞୁ	ଞେ	ଞୋ	ଞଃ	ଞ୍	ଞ୍
JHS	ସ	ସା	ସି	ସୁ	ସେ	ସୋ	ସଃ	ସ୍	ସ୍
JHSH	ଷ	ଷା	ଷି	ଷୁ	ଷେ	ଷୋ	ଷଃ	ଷ୍	ଷ୍
JHSS	ସ୍ପ	ସ୍ପା	ସ୍ପି	ସ୍ପୁ	ସ୍ପେ	ସ୍ପୋ	ସ୍ପଃ	ସ୍ପ୍	ସ୍ପ୍
JHH	ଝ	ଝା	ଝି	ଝୁ	ଝେ	ଝୋ	ଝଃ	ଝ୍	ଝ୍

Table 12 : Cluster ઝ NJ with vowel, nasal and long sound diacritical marks

Character NJ	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
NJK	ઝ NJKA	ઝા NJKAA	ઝિ NJKI	ઝુ NJKU	ઝે NJKE	ઝો NJKO	ઝઃ NJKA:	ઝઃ̃ NJKĀ	ઝઃ̃ NJKĀ:
NJKH	ઝહ	ઝાહ	ઝિહ	ઝુહ	ઝેહ	ઝોહ	ઝઃહ	ઝઃ̃હ	ઝઃ̃હ
NJG	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJGH	ઝઘ	ઝાઘ	ઝિઘ	ઝુઘ	ઝેઘ	ઝોઘ	ઝઃઘ	ઝઃ̃ઘ	ઝઃ̃ઘ
NJNG	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJC	ઝજ	ઝાજ	ઝિજ	ઝુજ	ઝેજ	ઝોજ	ઝઃજ	ઝઃ̃જ	ઝઃ̃જ
NJCH	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJJ	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJJH	ઝઙહ	ઝાઙહ	ઝિઙહ	ઝુઙહ	ઝેઙહ	ઝોઙહ	ઝઃઙહ	ઝઃ̃ઙહ	ઝઃ̃ઙહ
NJNJ	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJT	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJTT	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJTH	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ
NJTTH	ઝઙ	ઝાઙ	ઝિઙ	ઝુઙ	ઝેઙ	ઝોઙ	ઝઃઙ	ઝઃ̃ઙ	ઝઃ̃ઙ

Table 12 : Cluster ઝ NJ with vowel, nasal and long sound diacritical marks

Character NJ	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
NJD	ઝ	ઝા	ઝિ	ઝુ	ઝે	ઝો	ઝઃ	ઝ̄	ઝ̄:
NJDD	ઝ	ઝા	ઝિ _y	ઝુ	ઝે	ઝો	ઝઃ	ઝ̄	ઝ̄:
	NDDA	NJDDAA	NDDI	NJDDU	NJDDE	NJDDO	NJDDA:	NDDĀ	NJDDĀ:
NJDH	ઝ	ઝા	ઝિ	ઝુ	ઝે	ઝો	ઝઃ	ઝ̄	ઝ̄:
NJDDH	ઝ	ઝા	ઝિ	ઝુ	ઝે	ઝો	ઝઃ	ઝ̄	ઝ̄:
NJN	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJNN	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJP	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJPH	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJB	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJBH	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJM	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJY	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
NJR	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:

Table 12 : Cluster ࠁ NJ with vowel, nasal and long sound diacritical marks

Character NJ	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A:	Ā	Ī	Ū	Ē	Ō			
NJL	ཨ	ཨྂ	ཨྃ	ཨ྄	ཨ྅	ཨ྆	ཨཾ	ཨྏ	ཨྐ
NJW	ཱ	ཱྂ	ཱྃ	྄ཱ	ཱ྅	ཱ྆	ཱཾ	ཱྏ	ཱྐ
NJS	ཨ	ཨྂ	ཨྃ	ཨ྄	(ཨ྅)	(ཨ྆)	ཨཾ	ཨྏ	ཨྐ
NJSH	ཨ	ཨྂ	ཨྃ	ཨ྄	ཨ྅	ཨ྆	ཨཾ	ཨྏ	ཨྐ
NJSS	ཨ	ཨྂ	ཨྃ	ཨ྄	(ཨ྅)	(ཨ྆)	ཨཾ	ཨྏ	ཨྐ

Table 13 : Cluster ढ T with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
ढ	अ	आ	इ	उ	ए	ओ	अः	अं	अः
TK	क TKA	का TKAA	कि TKI	कु TKU	के TKE	को TKO	कः TKA:	कं TKAं	कः TKAः
TKH	ख	खा	खि	खु	खे	खो	खः	खं	खः
TG	ग	गा	गि	गु	गे	गो	गः	गं	गः
TGH	घ	घा	घि	घु	घे	घो	घः	घं	घः
TNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङः
TC	च	चा	चि	चु	चे	चो	चः	चं	चः
TCH	छ	छा	छि	छु	छे	छो	छः	छं	छः
TJ	ज	जा	जि	जु	जे	जो	जः	जं	जः
TJH	झ	झा	झि	झु	झे	झो	झः	झं	झः
TNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जः
TT	ट	टा	टि	टु	टे	टो	टः	टं	टः
TTT	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठः
TTH	ड	डा	डि	डु	डे	डो	डः	डं	डः
TTTH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढं	ढः

Table 13 : Cluster ढ T with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
T	A	AA	I	U	E	O	A:	Ā	Ā:
TD	ट	ठा	टि	टु	टे	टो	टः	टँ	टं
TDD	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठँ	ठं
TDH	ध	धा	धि	धु	धे	धो	धः	धँ	धं
	TDHA	TDHAA	TDHI	TDHU	TDHE	TDHO	TDHA:	TDHĀ	TDHĀ:
TDDH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढँ	ढं
TN	न	ना	नि	नु	ने	नो	नः	नँ	नं
TNN	ण	णा	णि	णु	णे	णो	णः	णँ	णं
TP	प	पा	पि	पु	पे	पो	पः	पँ	पं
TPH	फ	फा	फि	फु	फे	फो	फः	फँ	फं
TB	ब	बा	बि	बु	बे	बो	बः	बँ	बं
TBH	भ	भा	भि	भु	भे	भो	भः	भँ	भं
TM	म	मा	मि	मु	मे	मो	मः	मँ	मं
TY	य	या	यि	यु	ये	यो	यः	यँ	यं
TR	र	रा	रि	रु	रे	रो	रः	रँ	रं

Table 13 : Cluster ढ T with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
T	A	AA	I	U	E	O	A:	Ā	Ā:
TL	त	ता	ति	तु	ते	तो	तः	ताँ	ताँः
TW	व	वा	वि	वु	वे	वो	वः	वाँ	वाँः
TS	स	सा	सि	सु	से	सो	सः	साँ	साँः
TSH	श	शा	शि	शु	शे	शो	शः	शाँ	शाँः
TSS	ष	षा	षि	षु	षे	षो	षः	षाँ	षाँः

Table 14 : Cluster ट TT with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
TTK	क TTKA	का TTKAA	कि TTKI	कु TTKU	के TTKE	को TTKO	कः TTKA:	काँ TTKĀ	काँ TTKĀ:
TTKH	ख	खा	खि	खु	खे	खो	खः	खाँ	खाँ
TTG	ग	गा	गि	गु	गे	गो	गः	गाँ	गाँ
TTGH	घ	घा	घि	घु	घे	घो	घः	घाँ	घाँ
TTNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङाँ	ङाँ
TTT	ट	टा	टि	टु	टे	टो	टः	टाँ	टाँ
TTCH	छ	छा	छि	छु	छे	छो	छः	छाँ	छाँ
TTJ	झ	झा	झि	झु	झे	झो	झः	झाँ	झाँ
TTJH	ञ	जा	जि	जु	जे	जो	जः	जाँ	जाँ
TTNJ	ण	णा	णि	णु	णे	णो	णः	णाँ	णाँ
TTT	द	दा	दि	दु	दे	दो	दः	दाँ	दाँ
TTTT	ड	डा	डि	डु	डे	डो	डः	डाँ	डाँ
TTTH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढाँ	ढाँ
TTTTH	ण	णा	णि	णु	णे	णो	णः	णाँ	णाँ

Table 14 : Cluster ਟ TT with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
TT	A	AA	I	U	E	O	A:	Ā	Ā:
TTD	ਟ	ਟ	ਤਿ	ਤੁ	ਤੌ	ਤੋ	ਟੌ	ਟੁ	ਟੁ
TTDD	ਡ	ਡਾ	ਡਿ	ਡੁ	ਡੌ	ਡੋ	ਡੌ	ਡੁ	ਡੁ
TTDH	ਢ	ਢਾ	ਢਿ	ਢੁ	ਢੌ	ਢੋ	ਢੌ	ਢੁ	ਢੁ
	TTDHA	TTDHAA	TTDHI	TTDHU	TTDHE	TTDHO	TTDHA:	TTDH Ā	TTDH Ā:
TTDDH	ਡੁ	ਡਾ	ਡਿ	ਡੁ	ਡੌ	ਡੋ	ਡੌ	ਡੁ	ਡੁ
TTN	ਨ	ਨਾ	ਨਿ	ਨੁ	ਨੌ	ਨੋ	ਨੌ	ਨੁ	ਨੁ
TTNN	ਨੁ	ਨਾ	ਨਿ	ਨੁ	ਨੌ	ਨੋ	ਨੌ	ਨੁ	ਨੁ
TPP	ਪ	ਪਾ	ਪਿ	ਪੁ	ਪੌ	ਪੋ	ਪੌ	ਪੁ	ਪੁ
TPPH	ਪੁ	ਪਾ	ਪਿ	ਪੁ	ਪੌ	ਪੋ	ਪੌ	ਪੁ	ਪੁ
TTB	ਬ	ਬਾ	ਬਿ	ਬੁ	ਬੌ	ਬੋ	ਬੌ	ਬੁ	ਬੁ
TTBH	ਬੁ	ਬਾ	ਬਿ	ਬੁ	ਬੌ	ਬੋ	ਬੌ	ਬੁ	ਬੁ
TTM	ਮ	ਮਾ	ਮਿ	ਮੁ	ਮੌ	ਮੋ	ਮੌ	ਮੁ	ਮੁ
TTY	ਯ	ਯਾ	ਯਿ	ਯੁ	ਯੌ	ਯੋ	ਯੌ	ਯੁ	ਯੁ
TTT	ਤ	ਤਾ	ਤਿ	ਤੁ	ਤੌ	ਤੋ	ਤੌ	ਤੁ	ਤੁ

Table 14 : Cluster ਟ TT with vowel, nasal and long sound diacritical marks

Character TT	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A:	Ā	Ī	Ū	Ē	Ō	A:	Ā	Ā:
TTL	ਟ	ਛ	ੜਿ	ਛੁ	ਛੇ	ਛੋ	ਟੜ	ਛੁੰ	ਛੁੰ
TTW	ਫ	ਘ	ਝਿ	ਛੁ	ਛੇ	ਛੋ	ਫੜ	ਛੁੰ	ਛੁੰ
TTS	ਸ਼	ਸ਼ਾ	ਸ਼ਿ	ਸ਼ੁ	ਸ਼ੇ	ਸ਼ੋ	ਸ਼ੜ	ਸ਼ੁੰ	ਸ਼ੁੰ
TTSH	ਫ਼	ਘ਼	ਝ਼ਿ	ਛ਼ੁ	ਛ਼ੇ	ਛ਼ੋ	ਫ਼ੜ	ਛ਼ੁੰ	ਛ਼ੁੰ
TTSS	ਸ਼	ਸ਼ਾ	ਸ਼ਿ	ਸ਼ੁ	ਸ਼ੇ	ਸ਼ੋ	ਸ਼ੜ	ਸ਼ੁੰ	ਸ਼ੁੰ

Table 15 : Cluster ๓ TH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
THK	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄:
THKH	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THG	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THGH	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THNG	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THC	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THCH	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THJ	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THJH	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THNJ	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THT	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THTT	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THTH	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄
THTTH	๓	๓๓	๓ิ	๓ุ	๓เ	๓อ	๓๑	๓̄	๓̄

Table 15 : Cluster ૫ TH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
TH	A	AA	I	U	E	O	A:	Ā	Ā:
THD	ટ	ટા	ટિ	ટુ	ટે	ટો	ટઃ	ટ̄	ટ̄:
THDD	ટુ	ટા	ટિ	ટુ	ટે	ટો	ટઃ	ટ̄	ટ̄:
	THDDA	THDDAA	THDDI	THDDU	THDDE	THDDO	THDDA:	THDDĀ	THDDĀ:
THDH	ઘ	ઘા	ઘિ	ઘુ	ઘે	ઘો	ઘઃ	ઘ̄	ઘ̄:
THDDH	ઘુ	ઘા	ઘિ	ઘુ	ઘે	ઘો	ઘઃ	ઘ̄	ઘ̄:
THN	ઞ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
THNN	ઞુ	ઞા	ઞિ	ઞુ	ઞે	ઞો	ઞઃ	ઞ̄	ઞ̄:
THP	પ	પા	પિ	પુ	પે	પો	પઃ	પ̄	પ̄:
THPH	પુ	પા	પિ	પુ	પે	પો	પઃ	પ̄	પ̄:
THB	બ	બા	બિ	બુ	બે	બો	બઃ	બ̄	બ̄:
THBH	બુ	બા	બિ	બુ	બે	બો	બઃ	બ̄	બ̄:
THM	મ	મા	મિ	મુ	મે	મો	મઃ	મ̄	મ̄:
THY	ય	યા	યિ	યુ	યે	યો	યઃ	ય̄	ય̄:
THR	ર	રા	રિ	રુ	રે	રો	રઃ	ર̄	ર̄:

Table 15 : Cluster 𑄢 TH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
TH	A	AA	I	U	E	O	A:	Ā	Ā:
THL	𑄢𑄣	𑄢𑄤	𑄢𑄥	𑄢𑄦	𑄢𑄧	𑄢𑄨	𑄢𑄩	𑄢𑄪	𑄢𑄫
THW	𑄢𑄬	𑄢𑄭	𑄢𑄮	𑄢𑄯	𑄢𑄰	𑄢𑄱	𑄢𑄲	𑄢𑄳	𑄢𑄴
THS	𑄢𑄵	𑄢𑄶	𑄢𑄷	𑄢𑄸	𑄢𑄹	𑄢𑄺	𑄢𑄻	𑄢𑄼	𑄢𑄽
THSH	𑄢𑄾	𑄢𑄿	𑄢𑅀	𑄢𑅁	𑄢𑅂	𑄢𑅃	𑄢𑅄	𑄢𑅅	𑄢𑅆
THSS	𑄢𑅇	𑄢𑅈	𑄢𑅉	𑄢𑅊	𑄢𑅋	𑄢𑅌	𑄢𑅍	𑄢𑅎	𑄢𑅏

Table 16 : Cluster 0 TTH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
TTH	A	AA	I	U	E	O	A:	Ā	Ā:
TTHK	କ TTHKA	କା TTHKAA	କି TTHKI	କୁ TTHKU	କେ TTHKE	କୋ TTHKO	କଃ TTHKA:	କ̄ TTHKĀ	କ̄: TTHKĀ:
TTHKH	କ୍ଷ TTHKHA	କ୍ଷା TTHKHA	କ୍ଷି TTHKHI	କ୍ଷୁ TTHKHU	କ୍ଷେ TTHKHE	କ୍ଷୋ TTHKHO	କ୍ଷଃ TTHKHA:	କ୍ଷ̄ TTHKHĀ	କ୍ଷ̄: TTHKHĀ:
TTHG	ଗ TTHGA	ଗା TTHGAA	ଗି TTHGI	ଗୁ TTHGU	ଗେ TTHGE	ଗୋ TTHGO	ଗଃ TTHGA:	ଗ̄ TTHGĀ	ଗ̄: TTHGĀ:
TTHGH	ଗ୍ଧ TTHGHA	ଗ୍ଧା TTHGHA	ଗ୍ଧି TTHGHI	ଗ୍ଧୁ TTHGHU	ଗ୍ଧେ TTHGHE	ଗ୍ଧୋ TTHGHO	ଗ୍ଧଃ TTHGHA:	ଗ୍ଧ̄ TTHGHĀ	ଗ୍ଧ̄: TTHGHĀ:
TTHNG	ଙ TTHNGA	ଙା TTHNGAA	ଙି TTHNGI	ଙୁ TTHNGU	ଙେ TTHNGE	ଙୋ TTHNGO	ଙଃ TTHNGA:	ଙ̄ TTHNGĀ	ଙ̄: TTHNGĀ:
TTHC	ଚ TTHCA	ଚା TTHCAA	ଚି TTHCI	ଚୁ TTHCU	ଚେ TTHCE	ଚୋ TTHCO	ଚଃ TTHCA:	ଚ̄ TTHCĀ	ଚ̄: TTHCĀ:
TTHCH	ଚ୍ଛ TTHCHA	ଚ୍ଛା TTHCHA	ଚ୍ଛି TTHCHI	ଚ୍ଛୁ TTHCHU	ଚ୍ଛେ TTHCHE	ଚ୍ଛୋ TTHCHO	ଚ୍ଛଃ TTHCHA:	ଚ୍ଛ̄ TTHCHĀ	ଚ୍ଛ̄: TTHCHĀ:
TTHJ	ଜ TTHJA	ଜା TTHJAA	ଜି TTHJI	ଜୁ TTHJU	ଜେ TTHJE	ଜୋ TTHJO	ଜଃ TTHJA:	ଜ̄ TTHJĀ	ଜ̄: TTHJĀ:
TTHJH	ଜ୍ଞ TTHJHA	ଜ୍ଞା TTHJHA	ଜ୍ଞି TTHJHI	ଜ୍ଞୁ TTHJHU	ଜ୍ଞେ TTHJHE	ଜ୍ଞୋ TTHJHO	ଜ୍ଞଃ TTHJHA:	ଜ୍ଞ̄ TTHJHĀ	ଜ୍ଞ̄: TTHJHĀ:
TTHNJ	ଞ TTHNJA	ଞା TTHNJAA	ଞି TTHNJI	ଞୁ TTHNJU	ଞେ TTHNJE	ଞୋ TTHNJO	ଞଃ TTHNJA:	ଞ̄ TTHNJĀ	ଞ̄: TTHNJĀ:
TTHT	ଟ TTHTA	ଟା TTHTAA	ଟି TTHTI	ଟୁ TTHTU	ଟେ TTHTE	ଟୋ TTHTO	ଟଃ TTHTA:	ଟ̄ TTHTĀ	ଟ̄: TTHTĀ:
TTHTT	ଟ୍ଟ TTHTTA	ଟ୍ଟା TTHTTAA	ଟ୍ଟି TTHTTI	ଟ୍ଟୁ TTHTTU	ଟ୍ଟେ TTHTTE	ଟ୍ଟୋ TTHTTO	ଟ୍ଟଃ TTHTTA:	ଟ୍ଟ̄ TTHTTĀ	ଟ୍ଟ̄: TTHTTĀ:
TTHTH	ଥ TTHTHA	ଥା TTHTHAA	ଥି TTHTHI	ଥୁ TTHTHU	ଥେ TTHTHE	ଥୋ TTHTHO	ଥଃ TTHTHA:	ଥ̄ TTHTHĀ	ଥ̄: TTHTHĀ:
TTHTTH	ଥ୍ଥ TTHTTHA	ଥ୍ଥା TTHTTHAA	ଥ୍ଥି TTHTTHI	ଥ୍ଥୁ TTHTTHU	ଥ୍ଥେ TTHTTHE	ଥ୍ଥୋ TTHTTHO	ଥ୍ଥଃ TTHTTHA:	ଥ୍ଥ̄ TTHTTHĀ	ଥ୍ଥ̄: TTHTTHĀ:

Table 16 : Cluster 0 TTH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
TTH	A	AA	I	U	E	O	A:	Ā	Ā:
TTHD	ଡ	ଡା	ଡି	ଡୁ	ଡେ	ଡୋ	ଡଃ	ଡ̃	ଡ̃:
TTHDD	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̃	ଢ̃:
TTHDH	ଘ	ଘା	ଘି	ଘୁ	ଘେ	ଘୋ	ଘଃ	ଘ̃	ଘ̃:
	TTHDHA	TTHDHAA	TTHDHI	TTHDHU	TTHDHE	TTHDHO	TTHDHA:	TTHDHĀ	TTHDHĀ:
TTHDDH	ଢ଼	ଢ଼ା	ଢ଼ି	ଢ଼ୁ	ଢ଼େ	ଢ଼ୋ	ଢ଼ଃ	ଢ଼̃	ଢ଼̃:
TTHN	ନ	ନା	ନି	ନୁ	ନେ	ନୋ	ନଃ	ନ̃	ନ̃:
TTHNN	ନ୍	ନ୍ନା	ନ୍ନି	ନ୍ନୁ	ନ୍ନେ	ନ୍ନୋ	ନ୍ନଃ	ନ୍ନ̃	ନ୍ନ̃:
TTHP	ପ	ପା	ପି	ପୁ	ପେ	ପୋ	ପଃ	ପ̃	ପ̃:
TTHPH	ଫ	ଫା	ଫି	ଫୁ	ଫେ	ଫୋ	ଫଃ	ଫ̃	ଫ̃:
TTHB	ବ	ବା	ବି	ବୁ	ବେ	ବୋ	ବଃ	ବ̃	ବ̃:
TTHBH	ଭ	ଭା	ଭି	ଭୁ	ଭେ	ଭୋ	ଭଃ	ଭ̃	ଭ̃:
TTHM	ମ	ମା	ମି	ମୁ	ମେ	ମୋ	ମଃ	ମ̃	ମ̃:
TTHY	ଯ	ଯା	ଯି	ଯୁ	ଯେ	ଯୋ	ଯଃ	ଯ̃	ଯ̃:
TTHR	ର	ରା	ରି	ରୁ	ରେ	ରୋ	ରଃ	ର̃	ର̃:

Table 16 : Cluster 0 TTH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
TTH	A	AA	I	U	E	O	A:	Ā	Ā:
TTHL	ଅ	ଆ	ଇ	ଉ	ଏ	ଓ	ଅଃ	ଆ̃	ଆ̃ଃ
TTHW	ଋ	ୠ	ୡ	ୣ	୤	୦	ଋଃ	ୠ̃	ୠ̃ଃ
TTHS	ସ	ସା	ସି	ସୁ	ସେ	ସୋ	ସଃ	ସା̃	ସା̃ଃ
TTHSH	ଶ	ଶା	ଶି	ଶୁ	ଶେ	ଶୋ	ଶଃ	ଶା̃	ଶା̃ଃ
TTHSS	ଷ	ଷା	ଷି	ଷୁ	ଷେ	ଷୋ	ଷଃ	ଷା̃	ଷା̃ଃ
TTHH	ହ	ହା	ହି	ହୁ	ହେ	ହୋ	ହଃ	ହା̃	ହା̃ଃ

Table 17 : Cluster ढ D with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
D	A	AA	I	U	E	O	A:	Ā	Ā:
DK	क DKA	का DKAA	कि DKI	कु DKU	के DKE	को DKO	कः DKA:	काँ DKĀ	काँ DKĀ:
DKH	क्ष	क्षा	क्षि	क्षु	क्षे	क्षो	क्षः	क्षाँ	क्षाँ
DG	ग	गा	गि	गु	गे	गो	गः	गाँ	गाँ
DGH	घ	घा	घि	घु	घे	घो	घः	घाँ	घाँ
DNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङाँ	ङाँ
DC	च	चा	चि	चु	चे	चो	चः	चाँ	चाँ
DCH	छ	छा	छि	छु	छे	छो	छः	छाँ	छाँ
DJ	ज	जा	जि	जु	जे	जो	जः	जाँ	जाँ
DJH	झ	झा	झि	झु	झे	झो	झः	झाँ	झाँ
DNJ	ञ	जा	जि	जु	जे	जो	जः	जाँ	जाँ
DT	ट	टा	टि	टु	टे	टो	टः	टाँ	टाँ
DTT	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठाँ	ठाँ
DTH	ड	डा	डि	डु	डे	डो	डः	डाँ	डाँ
DTTH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढाँ	ढाँ

Table 17 : Cluster ढ D with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
D	A	AA	I	U	E	O	A:	Ā	Ā:
DD	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DDD	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
	DDDA	DDDA A	DDDI	DDDU	DDDE	DDDO	DDDA:	DDD Ā	DDDĀ
DDH	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DDDH	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DN	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DNN	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DP	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DPH	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DB	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DBH	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DM	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DY	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ
DR	ड	डा	दि	डु	डे	डो	डः	दाँ	दाँ

Table 17 : Cluster ढ D with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
D	A	AA	I	U	E	O	A:	Ā	Ā:
DL	द	दा	दि	दु	दे	दो	दः	दाँ	दाँः
DW	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढाँ	ढाँः
DS	ड	डा	डि	डु	डे	डो	डः	डाँ	डाँः
DSH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढाँ	ढाँः
DSS	द्य	द्या	द्यि	द्यु	द्ये	द्यो	द्यः	द्याँ	द्याँः

Annex-V Table-18 : Cluster 3 DD with vowel, nasal and long sound diacritical marks

Character DD	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	A	A:
DDK	क DDKA	का DDKAA	कि DDKI	कु DDKU	के DDKE	को DDKO	कः DDKA:	कँ DDKA	कं DDKA:
DDKH	ख	खा	खि	खु	खे	खो	खः	खँ	खं
DDG	ग	गा	गि	गु	गे	गो	गः	गँ	गं
DDGH	घ	घा	घि	घु	घे	घो	घः	घँ	घं
DDNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङँ	ङं
DDC	च	चा	चि	चु	चे	चो	चः	चँ	चं
DDCH	छ	छा	छि	छु	छे	छो	छः	छँ	छं
DDJ	ज	जा	जि	जु	जे	जो	जः	जँ	जं
DDJH	झ	झा	झि	झु	झे	झो	झः	झँ	झं
DDNJ	ञ	जा	जि	जु	जे	जो	जः	जँ	जं
DDT	ट	टा	टि	टु	टे	टो	टः	टँ	टं
DDTT	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठँ	ठं
DDTH	ड	डा	डि	डु	डे	डो	डः	डँ	डं
DDTTH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढँ	ढं
DDD	त	ता	ति	तु	ते	तो	तः	तँ	तं

	A	AA	I	U	E	O	A:	A	A:
DDDD	उ DDDDA	आ DDDDAA	इ DDDDI	ऊ DDDDU	उ DDDD E	अ DDDDO	उ४ DDDDA:	उँ DDDDA	उं DDDDA:
DDDH	व	वा	वि	वू	व	वा	व४	वँ	वं
DDDDH	हु	हा	हि	हू	हु	हा	हु४	हुँ	हुं
DDN	न्न	न्ना	न्नि	न्नू	न्न	न्ना	न्न४	न्नँ	न्नं
DDNN	रु	रा	रि	रू	रु	रा	रु४	रुँ	रुं
DDP	य	या	यि	यू	य	या	य४	यँ	यं
DDPH	रू	रा	रि	रू	रू	रा	रू४	रूँ	रूं
DDB	व	वा	वि	वू	व	वा	व४	वँ	वं
DDBH	रु	रा	रि	रू	रु	रा	रु४	रुँ	रुं
DDM	म	मा	मि	मू	म	मा	म४	मँ	मं
DDY	य	या	यि	यू	य	या	य४	यँ	यं
DDR	व	वा	वि	वू	व	वा	व४	वँ	वं
DDL	न्न	न्ना	न्नि	न्नू	न्न	न्ना	न्न४	न्नँ	न्नं
DDW	व	वा	वि	वू	व	वा	व४	वँ	वं
DDS	य	या	यि	यू	य	या	य४	यँ	यं
DDSH	न्न	न्ना	न्नि	न्नू	न्न	न्ना	न्न४	न्नँ	न्नं
DDSS	य	या	यि	यू	य	या	य४	यँ	यं

Table 19 : Cluster ધ DH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
DH	A	AA	I	U	E	O	A:	Ā	Ā:
DHK	ક DHKA	કા DHKAA	કિ DHKI	કુ DHKU	કે DHKE	કો DHKO	કઃ DHKA:	ક̄ DHKĀ	ક̄: DHKĀ:
DHKH	કઘ DHKA	કાઘ DHKAA	કિઘ DHKI	કુઘ DHKU	કેઘ DHKE	કોઘ DHKO	કઃઘ DHKA:	ક̄ઘ DHKĀ	ક̄ઘ: DHKĀ:
DHG	ગ DHGA	ગા DHGAA	ગિ DHGI	ગુ DHGU	ગે DHGE	ગો DHGO	ગઃ DHGA:	ગ̄ DHGĀ	ગ̄: DHGĀ:
DHGH	ગઘ DHGA	ગાઘ DHGAA	ગિઘ DHGI	ગુઘ DHGU	ગેઘ DHGE	ગોઘ DHGO	ગઃઘ DHGA:	ગ̄ઘ DHGĀ	ગ̄ઘ: DHGĀ:
DHNG	ઙ DHNGA	ઙા DHNGAA	ઙિ DHNGI	ઙુ DHNGU	ઙે DHNGE	ઙો DHNGO	ઙઃ DHNGA:	ઙ̄ DHNGĀ	ઙ̄: DHNGĀ:
DHC	ચ DHCA	ચા DHCAA	ચિ DHCI	ચુ DHCU	ચે DHC E	ચો DHC O	ચઃ DHCA:	ચ̄ DHCĀ	ચ̄: DHCĀ:
DHCH	ચઘ DHCA	ચાઘ DHCAA	ચિઘ DHCI	ચુઘ DHCU	ચેઘ DHC E	ચોઘ DHC O	ચઃઘ DHCA:	ચ̄ઘ DHCĀ	ચ̄ઘ: DHCĀ:
DHJ	જ DHJA	જા DHJAA	જિ DHJI	જુ DHJU	જે DHJE	જો DHJO	જઃ DHJA:	જ̄ DHJĀ	જ̄: DHJĀ:
DHJH	જઘ DHJA	જાઘ DHJAA	જિઘ DHJI	જુઘ DHJU	જેઘ DHJE	જોઘ DHJO	જઃઘ DHJA:	જ̄ઘ DHJĀ	જ̄ઘ: DHJĀ:
DHNJ	ઞ DHNJA	ઞા DHNJAA	ઞિ DHNJI	ઞુ DHNJU	ઞે DHNJE	ઞો DHNJO	ઞઃ DHNJA:	ઞ̄ DHNJĀ	ઞ̄: DHNJĀ:
DHT	ટ DHTA	ટા DHTAA	ટિ DHTI	ટુ DHTU	ટે DHT E	ટો DHT O	ટઃ DHTA:	ટ̄ DHTĀ	ટ̄: DHTĀ:
DHTT	ટટ DHTTA	ટાટ DHTTAA	ટિટ DHTTI	ટુટ DHTTU	ટેટ DHTTE	ટોટ DHTTO	ટઃટ DHTTA:	ટ̄ટ DHTTĀ	ટ̄ટ: DHTTĀ:
DHTH	ઠ DHTHA	ઠા DHTHAA	ઠિ DHTHI	ઠુ DHTHU	ઠે DHTHE	ઠો DHTHO	ઠઃ DHTHA:	ઠ̄ DHTHĀ	ઠ̄: DHTHĀ:
DHTTH	ઠઠ DHTTHA	ઠાઠ DHTTHAA	ઠિઠ DHTTHI	ઠુઠ DHTTHU	ઠેઠ DHTTHE	ઠોઠ DHTTHO	ઠઃઠ DHTTHA:	ઠ̄ઠ DHTTHĀ	ઠ̄ઠ: DHTTHĀ:

Table 19 : Cluster ધ DH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
DH	A	AA	I	U	E	O	A:	Ā	Ā:
DHD	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHDD	ધુ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
	DHDDA	DHDDAA	DHDDI	DHDDU	DHDD E	DHDDO	DHDDA:	DHDDĀ	DHDDĀ:
DHDH	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHDDH	ધુ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHN	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHNN	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHP	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHPH	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHB	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHBH	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHM	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHY	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:
DHR	ધ	ધા	ધિ	ધુ	ધે	ધો	ધઃ	ધ̄	ધ̄:

Table 19 : Cluster ધ DH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
DH	A	AA	I	U	E	O	A:	Ā	Ā:
DHL	ઢ	ઢા	ઢિ	ઢુ	ઢે	ઢો	ઢઃ	ઢ̄	ઢ̄:
DHW	ઢ	ઢા	ઢિ	ઢુ	ઢે	ઢો	ઢઃ	ઢ̄	ઢ̄:
DHS	ઢ	ઢા	ઢિ	ઢુ	ઢે	ઢો	ઢઃ	ઢ̄	ઢ̄:
DHSH	ઢ	ઢા	ઢિ	ઢુ	ઢે	ઢો	ઢઃ	ઢ̄	ઢ̄:
DHSS	ઢ	ઢા	ઢિ	ઢુ	ઢે	ઢો	ઢઃ	ઢ̄	ઢ̄:

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
DDHK	କ	କା	କି	କୁ	କେ	କୋ	କଃ	କଂ	କଃ
	DDHKA	DDHKAA	DDHKI	DDHKU	DDHKE	DDHKO	DDHKA:	DDHKĀ	DDHKĀ:
DDHKH	କ୍ଷ	କ୍ଷା	କ୍ଷି	କ୍ଷୁ	କ୍ଷେ	କ୍ଷୋ	କ୍ଷଃ	କ୍ଷଂ	କ୍ଷଃ
DDHG	ଗ	ଗା	ଗି	ଗୁ	ଗେ	ଗୋ	ଗଃ	ଗଂ	ଗଃ
DDHGH	ଗ୍ଧ	ଗ୍ଧା	ଗ୍ଧି	ଗ୍ଧୁ	ଗ୍ଧେ	ଗ୍ଧୋ	ଗ୍ଧଃ	ଗ୍ଧଂ	ଗ୍ଧଃ
DDHNG	ଙ	ଙା	ଙି	ଙୁ	ଙେ	ଙୋ	ଙଃ	ଙଂ	ଙଃ
DDHC	ଚ	ଚା	ଚି	ଚୁ	ଚେ	ଚୋ	ଚଃ	ଚଂ	ଚଃ
DDHCH	ଚ୍ଛ	ଚ୍ଛା	ଚ୍ଛି	ଚ୍ଛୁ	ଚ୍ଛେ	ଚ୍ଛୋ	ଚ୍ଛଃ	ଚ୍ଛଂ	ଚ୍ଛଃ
DDHJ	ଝ	ଝା	ଝି	ଝୁ	ଝେ	ଝୋ	ଝଃ	ଝଂ	ଝଃ
DDHJH	ଞ୍	ଞା	ଞି	ଞୁ	ଞେ	ଞୋ	ଞଃ	ଞଂ	ଞଃ
DDHNJ	ଞ୍ଝ	ଞ୍ଝା	ଞ୍ଝି	ଞ୍ଝୁ	ଞ୍ଝେ	ଞ୍ଝୋ	ଞ୍ଝଃ	ଞ୍ଝଂ	ଞ୍ଝଃ
DDHT	ଟ	ଟା	ଟି	ଟୁ	ଟେ	ଟୋ	ଟଃ	ଟଂ	ଟଃ
DDHTT	ଟ୍ଟ	ଟ୍ଟା	ଟ୍ଟି	ଟ୍ଟୁ	ଟ୍ଟେ	ଟ୍ଟୋ	ଟ୍ଟଃ	ଟ୍ଟଂ	ଟ୍ଟଃ
DDHTH	ଠ	ଠା	ଠି	ଠୁ	ଠେ	ଠୋ	ଠଃ	ଠଂ	ଠଃ
DDHTTH	ଠ୍ଠ	ଠ୍ଠା	ଠ୍ଠି	ଠ୍ଠୁ	ଠ୍ଠେ	ଠ୍ଠୋ	ଠ୍ଠଃ	ଠ୍ଠଂ	ଠ୍ଠଃ

Table -20 : Cluster ଢ DDH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
DDH	A	AA	I	U	E	O	A:	Ā	Ā:
DDHD	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHDD	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
	DDHDDA	DDHDDAA	DDHDDI	DDHDDU	DDHDD E	DDHDDO	DDHDDA:	DDHDDĀ	DDHDDĀ:
DDHDDH	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHDDHH	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHNN	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHNNN	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHP	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHPH	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHB	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHBH	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHM	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHY	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:
DDHR	ଢ	ଢା	ଢି	ଢୁ	ଢେ	ଢୋ	ଢଃ	ଢ̄	ଢ̄:

Table -20 : Cluster ढ DDH with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
DDH	A	AA	I	U	E	O	A:	Ā	Ā:
DDHL	ढ	झ	झि	डु	ढे	डो	ढः	ढ̄	ढ̄ः
DDHW	ढ	झ	झि	डु	ढे	डो	ढः	ढ̄	ढ̄ः
DDHS	झ	झा	झि	डु	झे	डो	झः	झ̄	झ̄ः
DDHSH	ढ	झ	झि	डु	ढे	डो	ढः	ढ̄	ढ̄ः
DDHSS	झ	झा	झि	डु	झे	डो	झः	झ̄	झ̄ः
DDHH	ड	डा	डि	डु	डे	डो	डः	ड̄	ड̄ः

Table 21 : Cluster न N with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
NK	क NKA	का NKAA	कि NKI	कु NKU	के NKE	को NKO	कः NKA:	कं NKĀ	कं NKĀ:
NKH	क्या	क्या	किया	क्यु	क्ये	क्यो	क्यः	क्यं	क्यं
NG	ग	गा	गि	गु	गे	गो	गः	गं	गं
NGH	ग्या	ग्या	गिया	ग्यु	ग्ये	ग्यो	ग्यः	ग्यं	ग्यं
NNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङं
NC	च	चा	चि	चु	चे	चो	चः	चं	चं
NCH	च्या	च्या	चिया	च्यु	च्ये	च्यो	च्यः	च्यं	च्यं
NJ	ज	जा	जि	जु	जे	जो	जः	जं	जं
NJH	ज्या	ज्या	जिया	ज्यु	ज्ये	ज्यो	ज्यः	ज्यं	ज्यं
NNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जं
NT	न	ना	नि	नु	ने	नो	नः	नं	नं
NTT	न्या	न्या	निया	न्यु	न्ये	न्यो	न्यः	न्यं	न्यं
NTH	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठं
NTHH	ठ्या	ठ्या	ठिया	ठ्यु	ठ्ये	ठ्यो	ठ्यः	ठ्यं	ठ्यं

Table 21 : Cluster न N with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
N	A	AA	I	U	E	O	A:	Ā	Ā:
ND	न	ना	नि	नु	ने	नो	नः	नं	नं
NDD	नु	ना	नि	नु	ने	नो	नः	नं	नं
	NDDA	NDDAA	NDDI	NDDU	NDDE	NDDO	NDDA:	NDDĀ	NDDĀ:
NDH	ध	धा	धि	धु	धे	धो	धः	धं	धं
NDDH	धु	धा	धि	धु	धे	धो	धः	धं	धं
NN	न	ना	नि	नु	ने	नो	नः	नं	नं
NP	न	ना	नि	नु	ने	नो	नः	नं	नं
NPH	न	ना	नि	नु	ने	नो	नः	नं	नं
NB	ब	बा	बि	बु	बे	बो	बः	बं	बं
NBH	ब	बा	बि	बु	बे	बो	बः	बं	बं
NM	म	मा	मि	मु	मे	मो	मः	मं	मं
NY	न	ना	नि	नु	ने	नो	नः	नं	नं
NR	र	रा	रि	रु	रे	रो	रः	रं	रं

Table 21 : Cluster न N with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
N	A	AA	I	U	E	O	A:	Ā	Ā:
NL	न	ना	नि	नु	ने	नो	नः	नँ	नं
NW	व	वा	वि	वु	वे	वो	वः	वँ	वं
NS	य	या	यि	यु	ये	यो	यः	यँ	यं
NSH	श	शा	शि	शु	शे	शो	शः	शँ	शं
NSS	ष	षा	षि	षु	षे	षो	षः	षँ	षं

Table 22 : Cluster ળ NN with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
NN	A	AA	I	U	E	O	A:	Ā	Ā:
NNK	ક NNKA	કા NNKAA	કિ NNKI	કુ NNKU	કે NNKE	કો NNKO	કઃ NNKA:	ક̄ NNKĀ	ક̄: NNKĀ:
NNKH	ઘ NNKA	ઘા NNKAA	ઘિ NNKI	ઘુ NNKU	ઘે NNKE	ઘો NNKO	ઘઃ NNKA:	ઘ̄ NNKĀ	ઘ̄: NNKĀ:
NNG	ગ NNKA	ગા NNKAA	ગિ NNKI	ગુ NNKU	ગે NNKE	ગો NNKO	ગઃ NNKA:	ગ̄ NNKĀ	ગ̄: NNKĀ:
NNGH	ઘ NNKA	ઘા NNKAA	ઘિ NNKI	ઘુ NNKU	ઘે NNKE	ઘો NNKO	ઘઃ NNKA:	ઘ̄ NNKĀ	ઘ̄: NNKĀ:
NNNG	ઙ NNKA	ઙા NNKAA	ઙિ NNKI	ઙુ NNKU	ઙે NNKE	ઙો NNKO	ઙઃ NNKA:	ઙ̄ NNKĀ	ઙ̄: NNKĀ:
NNC	ચ NNKA	ચા NNKAA	ચિ NNKI	ચુ NNKU	ચે NNKE	ચો NNKO	ચઃ NNKA:	ચ̄ NNKĀ	ચ̄: NNKĀ:
NNCH	ઞ NNKA	ઞા NNKAA	ઞિ NNKI	ઞુ NNKU	ઞે NNKE	ઞો NNKO	ઞઃ NNKA:	ઞ̄ NNKĀ	ઞ̄: NNKĀ:
NNJ	જ NNKA	જા NNKAA	જિ NNKI	જુ NNKU	જે NNKE	જો NNKO	જઃ NNKA:	જ̄ NNKĀ	જ̄: NNKĀ:
NNJH	ઝ NNKA	ઝા NNKAA	ઝિ NNKI	ઝુ NNKU	ઝે NNKE	ઝો NNKO	ઝઃ NNKA:	ઝ̄ NNKĀ	ઝ̄: NNKĀ:
NNNJ	ઞ NNKA	ઞા NNKAA	ઞિ NNKI	ઞુ NNKU	ઞે NNKE	ઞો NNKO	ઞઃ NNKA:	ઞ̄ NNKĀ	ઞ̄: NNKĀ:
NNT	ટ NNKA	ટા NNKAA	ટિ NNKI	ટુ NNKU	ટે NNKE	ટો NNKO	ટઃ NNKA:	ટ̄ NNKĀ	ટ̄: NNKĀ:
NNTT	ટ NNKA	ટા NNKAA	ટિ NNKI	ટુ NNKU	ટે NNKE	ટો NNKO	ટઃ NNKA:	ટ̄ NNKĀ	ટ̄: NNKĀ:
NNTH	ઠ NNKA	ઠા NNKAA	ઠિ NNKI	ઠુ NNKU	ઠે NNKE	ઠો NNKO	ઠઃ NNKA:	ઠ̄ NNKĀ	ઠ̄: NNKĀ:
NNTTH	ઠ NNKA	ઠા NNKAA	ઠિ NNKI	ઠુ NNKU	ઠે NNKE	ઠો NNKO	ઠઃ NNKA:	ઠ̄ NNKĀ	ઠ̄: NNKĀ:

Table 22 : Cluster ળ NN with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
NN	A	AA	I	U	E	O	A:	Ā	Ā:
NND	ળ	ળા	ળિ	ળુ	ળે	ળો	ળઃ	ળ̄	ળ̄:
NNDD	ળ	ળા	ળિ	ળુ	ળે	ળો	ળઃ	ળ̄	ળ̄:
	NNDDA	NNDDAA	NNDDI	NNDDU	NNDD E	NNDDO	NNDDA:	NNDDĀ	NNDDĀ:
NNDH	ળઘ	ળાઘ	ળિઘ	ળુઘ	ળેઘ	ળોઘ	ળઃઘ	ળ̄ઘ	ળ̄ઘ:
NNDDH	ળ	ળા	ળિ	ળુ	ળે	ળો	ળઃ	ળ̄	ળ̄:
NNP	ળપ	ળાપ	ળિપ	ળુપ	ળેપ	ળોપ	ળઃપ	ળ̄પ	ળ̄પ:
NNPH	ળ્	ળા્	ળિ્	ળુ્	ળે્	ળો્	ળઃ્	ળ્̄	ળ્̄:
NNB	ળબ	ળાબ	ળિબ	ળુબ	ળેબ	ળોબ	ળઃબ	ળ̄બ	ળ̄બ:
NNBH	ળ્બ	ળા્બ	ળિ્બ	ળુ્બ	ળે્બ	ળો્બ	ળઃ્બ	ળ્̄બ	ળ્̄બ:
NNM	ળમ	ળામ	ળિમ	ળુમ	ળેમ	ળોમ	ળઃમ	ળ̄મ	ળ̄મ:
NNY	ળય	ળાય	ળિય	ળુય	ળેય	ળોય	ળઃય	ળ̄ય	ળ̄ય:
NNR	ળર	ળાર	ળિર	ળુર	ળેર	ળોર	ળઃર	ળ̄ર	ળ̄ર:

Table 22 : Cluster ળ NN with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
NN	A	AA	I	U	E	O	A:	Ā	Ā:
NNL	ળ	ળા	ળિ	ળુ	ળે	ળો	ળઃ	ળ̄	ળ̄:
NNW	ળ	ળા	ળિ	ળુ	ળે	ળો	ળઃ	ળ̄	ળ̄:
NNS	ળઃ	ળાઃ	ળિઃ	ળુઃ	ળેઃ	ળોઃ	ળઃઃ	ળ̄ઃ	ળ̄ઃઃ
NNSH	ળ	ળા	ળિ	ળુ	ળે	ળો	ળઃ	ળ̄	ળ̄:
NNSS	ળઃ	ળાઃ	ળિઃ	ળુઃ	ળેઃ	ળોઃ	ળઃઃ	ળ̄ઃ	ળ̄ઃઃ

Table 23 : Cluster प P with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
PK	क PKA	का PKAA	कि PKI	कु PKU	के PKE	को PKO	कः PKA:	कं PKĀ	कः PKĀ:
PKH	खा	खा	खि	खु	खे	खो	खः	खं	खः
PG	ग	गा	गि	गु	गे	गो	गः	गं	गः
PGH	घ	घा	घि	घु	घे	घो	घः	घं	घः
PNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङः
PC	च	चा	चि	चु	चे	चो	चः	चं	चः
PCH	छ	छा	छि	छु	छे	छो	छः	छं	छः
PJ	ज	जा	जि	जु	जे	जो	जः	जं	जः
PJH	झ	झा	झि	झु	झे	झो	झः	झं	झः
PNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जः
PT	फ	फा	फि	फु	फे	फो	फः	फं	फः
PTT	पु	पु	पु	पु	पु	पु	पुः	पुं	पुं
PTH	फ	फा	फि	फु	फे	फो	फः	फं	फः
PTTH	पु	पु	पु	पु	पु	पु	पुः	पुं	पुं

Table 23 : Cluster प P with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
P	A	AA	I	U	E	O	A:	Ā	Ā:
PD	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PDD	पु	पुा	पुि	पुु	पुे	पुो	पुः	पुँ	पुं
	PDDA	PDDAA	PDDI	PDDU	PDDE	PDDO	PDDA:	PDDĀ	PDDĀ:
PDH	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PDDH	पु	पुा	पुि	पुु	पुे	पुो	पुः	पुँ	पुं
PN	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PNN	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PP	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PPH	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PB	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PBH	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PM	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PY	प	पा	पि	पु	पे	पो	पः	पाँ	पां
PR	प	पा	पि	पु	पे	पो	पः	पाँ	पां

Table 23 : Cluster प P with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
P	A	AA	I	U	E	O	A:	Ā	Ā:
PL	प	पा	पि	पु	पे	पो	पः	पँ	पं
PW	प्	पा	पि	पु	पे	पो	पः	पँ	पं
PS	प	पा	पि	पु	पे	पो	पः	पँ	पं
PSH	प	पा	पि	पु	पे	पो	पः	पँ	पं
PSS	प	पा	पि	पु	पे	पो	पः	पँ	पं

Table 24 : Cluster ऋ PH with vowel, nasal and long sound diacritical marks

Character PH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
PHK	क PHKA	का PHKAA	कि PHKI	कु PHKU	के PHKE	को PHKO	कः PHKA:	कं PHKĀ	कः PHKĀ:
PHKH	ख	खा	खि	खु	खे	खो	खः	खं	खः
PHG	ग	गा	गि	गु	गे	गो	गः	गं	गः
PHGH	घ	घा	घि	घु	घे	घो	घः	घं	घः
PHNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङः
PHC	च	चा	चि	चु	चे	चो	चः	चं	चः
PHCH	छ	छा	छि	छु	छे	छो	छः	छं	छः
PHJ	ज	जा	जि	जु	जे	जो	जः	जं	जः
PHJH	झ	झा	झि	झु	झे	झो	झः	झं	झः
PHNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जः
PHT	ट	टा	टि	टु	टे	टो	टः	टं	टः
PHTT	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठः
PHTH	ड	डा	डि	डु	डे	डो	डः	डं	डः
PHTTH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढं	ढः

Table 24 : Cluster ກ PH with vowel, nasal and long sound diacritical marks

Character PH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
PHD	ຸ	ູ	ຶ	ື	຺	ົ	ຸຶ	ຸ້	ຸ້
PHDD	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
	PHDDA	PHDDAA	PHDDI	PHDDU	PHDD E	PHDDO	PHDDA:	PHDDĀ	PHDDĀ:
PHDH	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHDDH	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHN	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHNN	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHP	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHPH	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHB	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHBH	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHM	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHY	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້
PHR	ູ	ູ	ຶ	ື	຺	ົ	ູຶ	ູ້	ູ້

Table 24 : Cluster ॠ PH with vowel, nasal and long sound diacritical marks

Character PH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
PHL	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄:
PHW	ॡ	ॢ	ॣ	।	॥	०	ॡ॥	ॡ̄	ॡ̄:
PHS	ॢ	ॣ	।	॥	०	ॠ	ॢ॥	ॢ̄	ॢ̄:
PHSH	ॣ	।	॥	०	ॠ	ॡ	ॣ॥	ॣ̄	ॣ̄:
PHSS	।	॥	०	ॠ	ॡ	ॢ	।॥	।̄	।̄:

Table 25 : Cluster ळ B with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
BK	क BKA	का BKAA	कि BKI	कु BKU	के BKE	को BKO	कः BKA:	कं BKĀ	कं BKĀ:
BKH	ख BKA	खा BKAA	खि BKI	खु BKU	खे BKE	खो BKO	खः BKA:	खं BKĀ	खं BKĀ:
BG	ग BKA	गा BKAA	गि BKI	गु BKU	गे BKE	गो BKO	गः BKA:	गं BKĀ	गं BKĀ:
BGH	घ BKA	घा BKAA	घि BKI	घु BKU	घे BKE	घो BKO	घः BKA:	घं BKĀ	घं BKĀ:
BNG	ङ BKA	ङा BKAA	ङि BKI	ङु BKU	ङे BKE	ङो BKO	ङः BKA:	ङं BKĀ	ङं BKĀ:
BC	च BKA	चा BKAA	चि BKI	चु BKU	चे BKE	चो BKO	चः BKA:	चं BKĀ	चं BKĀ:
BCH	छ BKA	छा BKAA	छि BKI	छु BKU	छे BKE	छो BKO	छः BKA:	छं BKĀ	छं BKĀ:
BJ	ज BKA	जा BKAA	जि BKI	जु BKU	जे BKE	जो BKO	जः BKA:	जं BKĀ	जं BKĀ:
BJH	झ BKA	झा BKAA	झि BKI	झु BKU	झे BKE	झो BKO	झः BKA:	झं BKĀ	झं BKĀ:
BNJ	ञ BKA	जा BKAA	जि BKI	जु BKU	जे BKE	जो BKO	जः BKA:	जं BKĀ	जं BKĀ:
BT	ट BKA	टा BKAA	टि BKI	टु BKU	टे BKE	टो BKO	टः BKA:	टं BKĀ	टं BKĀ:
BTT	ठ BKA	ठा BKAA	ठि BKI	ठु BKU	ठे BKE	ठो BKO	ठः BKA:	ठं BKĀ	ठं BKĀ:
BTH	ड BKA	डा BKAA	डि BKI	डु BKU	डे BKE	डो BKO	डः BKA:	डं BKĀ	डं BKĀ:
BTHH	ढ BKA	ढा BKAA	ढि BKI	ढु BKU	ढे BKE	ढो BKO	ढः BKA:	ढं BKĀ	ढं BKĀ:

Table 25 : Cluster ष B with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
B	A	AA	I	U	E	O	A:	Ā	Ā:
BD	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ
BDD	बु	बा	बि	बु	बु	बा	बुः	बाँ	बाँ
	BDDA	BDDAA	BDDI	BDDU	BDDE	BDDO	BDDA:	BDDĀ	BDDĀ:
BDH	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ
BDDH	बु	बा	बि	बु	बु	बा	बुः	बाँ	बाँ
BN	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ
BNN	बु	बा	बि	बु	बु	बा	बुः	बाँ	बाँ
BP	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ
BPH	बु	बा	बि	बु	बु	बा	बुः	बाँ	बाँ
BB	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ
BBH	बु	बा	बि	बु	बु	बा	बुः	बाँ	बाँ
BM	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ
BY	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ
BR	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँ

Table 25 : Cluster ष B with vowel, nasal and long sound diacritical marks

Character B	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
BL	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँः
BW	व	वा	वि	वु	वे	वो	वः	वाँ	वाँः
BS	ष	षा	षि	षु	षे	षो	षः	षाँ	षाँः
BSH	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँः
BSS	व	वा	वि	वु	वे	वो	वः	वाँ	वाँः

Table 26: Cluster ळ BH with vowel, nasal and long sound diacritical marks

Character BH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A:	Ā	Ī	Ū	Ē	Ō	A:	Ā	Ā:
BHK	क BHKA	का BHKAA	कि BHKI	कु BHKU	के BHKE	को BHKO	कः BHKA:	कं BHKĀ	कं BHKĀ:
BHKH	ख	खा	खि	खु	खे	खो	खः	खं	खं
BHG	ग	गा	गि	गु	गे	गो	गः	गं	गं
BHGH	घ	घा	घि	घु	घे	घो	घः	घं	घं
BHNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङं
BHC	च	चा	चि	चु	चे	चो	चः	चं	चं
BHCH	छ	छा	छि	छु	छे	छो	छः	छं	छं
BHJ	ज	जा	जि	जु	जे	जो	जः	जं	जं
BHJH	झ	झा	झि	झु	झे	झो	झः	झं	झं
BHNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जं
BHT	ट	टा	टि	टु	टे	टो	टः	टं	टं
BHTT	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठं
BHTH	ड	डा	डि	डु	डे	डो	डः	डं	डं
BHTTH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढं	ढं

Table 26: Cluster ढ BH with vowel, nasal and long sound diacritical marks

Character BH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long - A:	Nasal - Ā	Nasal & Long - Ā:
BHD	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढँ	ढं
BHDD	ढु	ढा	ढि	ढु	ढु	ढा	ढः	ढँ	ढं
	BHDDA	BHDDAA	BHDDI	BHDDU	BHDD E	BHDDO	BHDDA:	BHDDĀ	BHDDĀ:
BHDH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढँ	ढं
BHDDH	ढु	ढा	ढि	ढु	ढु	ढा	ढः	ढँ	ढं
BHN	न	ना	नि	नु	ने	नो	नः	नँ	नं
BHNN	न	ना	नि	नु	ने	ना	नः	नँ	नं
BHP	प	पा	पि	पु	पे	पो	पः	पँ	पं
BHPH	प	पा	पि	पु	पे	पा	पः	पँ	पं
BHB	ब	बा	बि	बु	बे	बो	बः	बँ	बं
BHBH	ब	बा	बि	बु	बे	बा	बः	बँ	बं
BHM	म	मा	मि	मु	मे	मो	मः	मँ	मं
BHY	य	या	यि	यु	ये	यो	यः	यँ	यं
BHR	र	रा	रि	रु	रे	रो	रः	रँ	रं

Table 26: Cluster ए BH with vowel, nasal and long sound diacritical marks

Character BH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ā	Ā:
BHL	अ	आ	इ	उ	ए	ओ	अः	आँ	आं
BHW	व	वा	वि	वु	वे	वो	वः	वाँ	वां
BHS	य	या	यि	यु	ये	यो	यः	याँ	यां
BHSH	श	शा	शि	शु	शे	शो	शः	शाँ	शां
BHSS	ष	षा	षि	षु	षे	षो	षः	षाँ	षां

Table 27 : Cluster म M with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
M									
MK	क MKA	का MKA A	कि MKI	कु MKU	के MKE	को MKO	कः MKA:	कं MKĀ	कः MKĀ:
MKH	क्ख	क्का	क्कि	क्कु	क्के	क्को	क्कः	क्कं	क्कः
MG	ग	गा	गि	गु	गे	गो	गः	गं	गः
MGH	ग्ग	ग्गा	ग्गि	ग्गु	ग्गे	ग्गो	ग्गः	ग्गं	ग्गः
MNG	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङं	ङः
MC	च	चा	चि	चु	चे	चो	चः	चं	चः
MCH	च्च	च्चा	च्चि	च्चु	च्चे	च्चो	च्चः	च्चं	च्चः
MJ	ज	जा	जि	जु	जे	जो	जः	जं	जः
MJH	ज्ज	ज्जा	ज्जि	ज्जु	ज्जे	ज्जो	ज्जः	ज्जं	ज्जः
MNJ	ञ	जा	जि	जु	जे	जो	जः	जं	जः
MT	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढं	ढः
MTT	ट्ट	ट्टा	ट्टि	ट्टु	ट्टे	ट्टो	ट्टः	ट्टं	ट्टः
MTH	ठ	ठा	ठि	ठु	ठे	ठो	ठः	ठं	ठः
MTTH	ट्ठ	ट्ठा	ट्ठि	ट्ठु	ट्ठे	ट्ठो	ट्ठः	ट्ठं	ट्ठः

Table 27 : Cluster म M with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
M	A	AA	I	U	E	O	A:	Ā	Ā:
MD	मृ	म्रा	म्रि	म्रु	म्रे	म्रो	मृ१	म्रुँ	म्रुं
MDD	मु	मुा	मुि	मुु	मुे	मुो	मु१	मुँ	मुं
	MDDS	MDDAA	MDDI	MDDU	MDDE	MDDO	MDDA:	MDDĀ	MDDĀ:
MDH	म्र	म्रा	म्रि	म्रु	म्रे	म्रो	म्र१	म्रुँ	म्रुं
MDDH	मु	मुा	मुि	मुु	मुे	मुो	मु१	मुँ	मुं
MN	म्न	म्रा	म्रि	म्रु	म्रे	म्रो	म्र१	म्रुँ	म्रुं
MNN	मु	मुा	मुि	मुु	मुे	मुो	मु१	मुँ	मुं
MP	म्य	म्रा	म्रि	म्रु	म्रे	म्रो	म्य१	म्रुँ	म्रुं
MPH	मू	म्रा	म्रि	म्रु	म्रे	म्रो	मू१	म्रुँ	म्रुं
MB	म्व	म्रा	म्रि	म्रु	म्रे	म्रो	म्व१	म्रुँ	म्रुं
MBH	मू	म्रा	म्रि	म्रु	म्रे	म्रो	मू१	म्रुँ	म्रुं
MM	मम	म्रा	म्रि	म्रु	म्रे	म्रो	मम१	म्रुँ	म्रुं
MY	म्य	म्रा	म्रि	म्रु	म्रे	म्रो	म्य१	म्रुँ	म्रुं
MR	म्र	म्रा	म्रि	म्रु	म्रे	म्रो	म्र१	म्रुँ	म्रुं

Table 27 : Cluster म M with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
M	A	AA	I	U	E	O	A:	Ā	Ā:
ML	म	मा	मि	मु	मे	मो	मः	मं	मं
MW	म	मा	मि	मु	मे	मो	मः	मं	मं
MS	म	मा	मि	मु	मे	मो	मः	मं	मं
MSH	म	मा	मि	मु	मे	मो	मः	मं	मं
MSS	म	मा	मि	मु	मे	मो	मः	मं	मं

Table 28 : Cluster ऋ R with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
RK	र्क RKA	र्का RKA A	र्कि RKI	र्कु RKU	र्के RKE	र्को RKO	र्कः RKA:	र्कं RKĀ	र्कः RKĀ:
RKH	र्ख RKA	र्खा RKA A	र्खि RKI	र्खु RKU	र्खे RKE	र्खो RKO	र्खः RKA:	र्खं RKĀ	र्खः RKĀ:
RG	र्ग RGA	र्गा RGA A	र्गि RGI	र्गु RGU	र्गे RGE	र्गो RGO	र्गः RGA:	र्गं RGĀ	र्गः RGĀ:
RGH	र्घ RGA	र्घा RGA A	र्घि RGI	र्घु RGU	र्घे RGE	र्घो RGO	र्घः RGA:	र्घं RGĀ	र्घः RGĀ:
RNG	र्ण RNA	र्णा RNA A	र्णि RNI	र्णु RNU	र्णे RNE	र्णो RNO	र्णः RNA:	र्णं RNĀ	र्णः RNĀ:
RC	र्च RCA	र्चा RCA A	र्चि RCI	र्चु RCU	र्चे RCE	र्चो RCO	र्चः RCA:	र्चं RCĀ	र्चः RCĀ:
RCH	र्छ RCA	र्छा RCA A	र्छि RCI	र्छु RCU	र्छे RCE	र्छो RCO	र्छः RCA:	र्छं RCĀ	र्छः RCĀ:
RJ	र्ज RJA	र्जा RJA A	र्जि RJI	र्जु RJU	र्जे RJE	र्जो RJO	र्जः RJA:	र्जं RJĀ	र्जः RJĀ:
RJH	र्झ RJA	र्झा RJA A	र्झि RJI	र्झु RJU	र्झे RJE	र्झो RJO	र्झः RJA:	र्झं RJĀ	र्झः RJĀ:
RNJ	र्ण RNA	र्णा RNA A	र्णि RNI	र्णु RNU	र्णे RNE	र्णो RNO	र्णः RNA:	र्णं RNĀ	र्णः RNĀ:
RT	र्त RTA	र्ता RTA A	र्ति RTI	र्तु RTU	र्ते RTE	र्तो RTO	र्तः RTA:	र्तं RTĀ	र्तः RTĀ:
RTT	र्ट RTA	र्टा RTA A	र्टि RTI	र्टु RTU	र्टे RTE	र्टो RTO	र्टः RTA:	र्टं RTĀ	र्टः RTĀ:
RTH	र्थ RTA	र्था RTA A	र्थि RTI	र्थु RTU	र्थे RTE	र्थो RTO	र्थः RTA:	र्थं RTĀ	र्थः RTĀ:
RTTH	र्ठ RTA	र्ठा RTA A	र्ठि RTI	र्ठु RTU	र्ठे RTE	र्ठो RTO	र्ठः RTA:	र्ठं RTĀ	र्ठः RTĀ:

Table 28 : Cluster ऋ R with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
R	A	AA	I	U	E	O	A:	Ā	Ā:
RD	द	दा	दि	दु	दे	दो	दः	दाँ	दाँः
RDD	ड	डा	दि	दु	दे	दो	डः	डाँ	डाँः
	RDDA	RDDAA	RDDI	RDDU	RDDE	RDDO	RDDA:	RDDĀ	RDDĀ:
RDH	ध	धा	धि	धु	धे	धो	धः	धाँ	धाँः
RDDH	ढ	ढा	ढि	ढु	ढे	ढो	ढः	ढाँ	ढाँः
RN	न	ना	नि	नु	ने	नो	नः	नाँ	नाँः
RNN	ण	णा	णि	णु	णे	णो	णः	णाँ	णाँः
RP	प	पा	पि	पु	पे	पो	पः	पाँ	पाँः
RPH	फ	फा	फि	फु	फे	फो	फः	फाँ	फाँः
RB	ब	बा	बि	बु	बे	बो	बः	बाँ	बाँः
RBH	भ	भा	भि	भु	भे	भो	भः	भाँ	भाँः
RM	म	मा	मि	मु	मे	मो	मः	माँ	माँः
RY	य	या	यि	यु	ये	यो	यः	याँ	याँः
RR	र	रा	रि	रु	रे	रो	रः	राँ	राँः

Table 28 : Cluster ऋ R with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
R	A	AA	I	U	E	O	A:	Ā	Ā:
RL	र्ल	र्ला	र्लि	र्लु	र्ले	र्लो	र्लः	र्लं	र्लः
RW	र्व	र्वी	र्वि	र्वु	र्वे	र्वो	र्वः	र्वं	र्वः
RS	र्स	र्सी	र्सि	र्सु	र्से	र्सो	र्सः	र्सं	र्सः
RSH	र्श	र्शी	र्शि	र्शु	र्शे	र्शो	र्शः	र्शं	र्शः
RSS	र्ष	र्षी	र्षि	र्षु	र्षे	र्षो	र्षः	र्षं	र्षः

Annex-V Table 29 : Cluster ल L with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
LK	ल	ला	लि	लु	ले	लो	लः	लं	लं
	LKA	LKAA	LKI	LKU	LKE	LKO	LKA:	LKĀ	LKĀ:
LKH	ल्रा	ल्राा	ल्रि	ल्रु	ल्रे	ल्रो	ल्रः	ल्रं	ल्रं
LG	ल्ल	ल्ला	ल्लि	ल्लु	ल्ले	ल्लो	ल्लः	ल्लं	ल्लं
LGH	लघ	लघा	लघि	लघु	लघे	लघो	लघः	लघं	लघं
LNG	लू	लूा	लूि	लूु	लूे	लूो	लूः	लूं	लूं
LC	ल्व	लवा	ल्वि	ल्वु	ल्वे	ल्वो	ल्वः	ल्वं	ल्वं
LCH	लृ	लृा	लृि	लृु	लृे	लृो	लृः	लृं	लृं
LJ	लु	लुा	लुि	लुु	लुे	लुो	लुः	लुं	लुं
LJH	ल्रा	ल्राा	ल्रि	ल्रु	ल्रे	ल्रो	ल्रः	ल्रं	ल्रं
LNJ	लु	लुा	लुि	लुु	लुे	लुो	लुः	लुं	लुं
LT	ल	ला	लि	लु	ले	लो	लः	लं	लं
LTT	लृ	लृा	लृि	लृु	लृे	लृो	लृः	लृं	लृं
LTH	लू	लूा	लूि	लूु	लूे	लूो	लूः	लूं	लूं
LTTH	लृ	लृा	लृि	लृु	लृे	लृो	लृः	लृं	लृं

Annex-V Table 29 : Cluster ଳ L with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
L	A	AA	I	U	E	O	A:	Â	Ã:
LD	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LDD	ଲୁ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
	LDDA	LDDAA	LDDI	LDDU	LDDE	LDDO	LDDA:	LDDÂ	LDDÃ:
LDH	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LDDH	ଲୁ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LN	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LNN	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LP	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LPH	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LB	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LBH	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LM	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LY	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ
LR	ଲ	ଲା	ଲି	ଲୁ	ଲେ	ଲୋ	ଲଃ	ଲାଂ	ଲାଂ

Annex-V Table 29 : Cluster ल L with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
L	A	AA	I	U	E	O	A:	Ā	Ā:
LL	ल	ला	लि	लु	ले	लो	लः	लँ	लं
LW	ल	ला	लि	लु	ले	लो	लः	लँ	लं
LS	ल	ला	लि	लु	ले	लो	लः	लँ	लं
LSH	ल	ला	लि	लु	ले	लो	लः	लँ	लं
LSS	ल	ला	लि	लु	ले	लो	लः	लँ	लं

Table 30 : Cluster स S with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
SK	स SKA	सा SKAA	सि SKI	सु SKU	से SKE	सो SKO	सः SKA:	साँ SKĀ	सः SKĀ:
SKH	सह SKHA	साह SKAAH	सिह SKIH	सुह SKUH	सेह SEH	सोह SOH	सहः SKHA:	साहँ SKĀH	सहः SKĀH:
SG	सग SGA	साग SGAA	सिग SIG	सुग SGU	सेग SEG	सोग SGO	सगः SGA:	सागँ SGĀ	सगः SGĀ:
SGH	सह SGHA	साह SGAAH	सिह SIGH	सुह SGUH	सेह SEH	सोह SOH	सहः SGHA:	साहँ SGĀH	सहः SGĀH:
SNG	सङ्ग SNGA	साङ्ग SNGAA	सिङ्ग SNGI	सुङ्ग SNGU	सेङ्ग SENG	सोङ्ग SNGO	सङ्गः SNGA:	साङ्गँ SNGĀ	सङ्गः SNGĀ:
SC	सक SCA	साक SCAA	सिक SICI	सुक SCU	सेक SEK	सोक SCO	सकः SCA:	साकँ SCĀ	सकः SCĀ:
SCH	सक SCH A	साक SCH AA	सिक SCH I	सुक SCH U	सेक SCH E	सोक SCH O	सकः SCH A:	साकँ SCH Ā	सकः SCH Ā:
SJ	सज SJA	साज SJA A	सिज SJI	सुज SJU	सेज SEJ	सोज SOJ	सजः SJA:	साजँ SJĀ	सजः SJĀ:
SJH	सह SJH A	साह SJH AA	सिह SJH I	सुह SJH U	सेह SEH	सोह SOH	सहः SJH A:	साहँ SJH Ā	सहः SJH Ā:
SNJ	सज SNJA	साज SNJA A	सिज SNJI	सुज SNJU	सेज SEJ	सोज SOJ	सजः SNJA:	साजँ SNJĀ	सजः SNJĀ:
ST	सत STA	सात STA A	सित SITI	सुत STU	सेत SET	सोत SOT	सतः STA:	सातँ STĀ	सतः STĀ:
STT	सत STT A	सात STT AA	सित STTI	सुत STTU	सेत SET	सोत SOT	सतः STT A:	सातँ STT Ā	सतः STT Ā:
STH	सह STH A	साह STH AA	सिह STHI	सुह STHU	सेह SEH	सोह SOH	सहः STH A:	साहँ STH Ā	सहः STH Ā:
STTH	सह STTH A	साह STTH AA	सिह STTH I	सुह STTH U	सेह SEH	सोह SOH	सहः STTH A:	साहँ STTH Ā	सहः STTH Ā:

Table 30 : Cluster स S with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
S	A	AA	I	U	E	O	A:	Ā	Ā:
SD	सृ	स्रा	स्रि	स्रु	स्रे	स्रो	सृ१	स्रँ	स्रं
SDD	सु	सुा	सुि	सुु	सुे	सुो	सु१	सुँ	सुं
	SDDA	SDDAA	SDDI	SDDU	SDDE	SDDO	SDDA:	SDDĀ	SDDĀ:
SDH	स्र	स्रा	स्रि	स्रु	स्रे	स्रो	स्र१	स्रँ	स्रं
SDDH	सु	सुा	सुि	सुु	सुे	सुो	सु१	सुँ	सुं
SN	स्र	स्रा	स्रि	स्रु	स्रे	स्रो	स्र१	स्रँ	स्रं
SNN	सु	सुा	सुि	सुु	सुे	सुो	सु१	सुँ	सुं
SP	स्य	स्या	स्रि	स्यु	स्ये	स्यो	स्य१	स्यँ	स्यं
SPH	सू	सूa	सूि	सूु	सूे	सूो	सू१	सूँ	सूं
SB	स्र	स्रा	स्रि	स्रु	स्रे	स्रो	स्र१	स्रँ	स्रं
SBH	सु	सुa	सुि	सुु	सुे	सुो	सु१	सुँ	सुं
SM	स्र	स्रा	स्रि	स्रु	स्रे	स्रो	स्र१	स्रँ	स्रं
SY	स्य	स्या	स्रि	स्यु	स्ये	स्यो	स्य१	स्यँ	स्यं
SR	स्र	स्रा	स्रि	स्रु	स्रे	स्रो	स्र१	स्रँ	स्रं

Table 30 : Cluster स S with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
S	A	AA	I	U	E	O	A:	Ā	Ā:
SL	स	सा	सि	सु	से	सो	सः	साँ	साँ
SW	स्व	स्वा	स्वि	सुव	स्वे	स्वो	स्वः	स्वाँ	स्वाँ
SS	स्य	स्या	स्यि	स्यु	स्ये	स्यो	स्यः	स्यौ	स्यौ
SSH	स्स	स्सा	स्सि	स्सु	स्से	स्सो	स्सः	स्साँ	स्साँ
SSS	स्य	स्या	स्यि	स्यु	स्ये	स्यो	स्यः	स्यौ	स्यौ

Table 31 : Cluster ສ SH with vowel, nasal and long sound diacritical marks

Character SH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
SHK	ສ SHKA	ສາ SHKAA	ສິ SHKI	ສຸ SHKU	ສະ SHKE	ສາ SHKO	ສຸ ັ SHKA:	ສ໌ SHKĀ	ສ໌ SHKĀ:
SHKH	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHG	ສ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສ ັ	ສ໌	ສ໌
SHGH	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHNG	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHC	ສ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສ ັ	ສ໌	ສ໌
SHCH	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHJ	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHJH	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHNJ	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHT	ສ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສ ັ	ສ໌	ສ໌
SHTT	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHTH	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌
SHTTH	ສຸ	ສາ	ສິ	ສຸ	ສະ	ສາ	ສຸ ັ	ສ໌	ສ໌

Table 31 : Cluster শ SH with vowel, nasal and long sound diacritical marks

Character SH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long - Nasal - Nasal & Long		
	A	AA	I	U	E	O	A:	Ā	Ā:
SHD	শ	শা	শি	শু	শে	শো	শঃ	শঁ	শঁঃ
SHDD	শু	শুা	শুি	শুু	শুে	শুো	শুঃ	শুঁ	শুঁঃ
	SHDDA	SHDDAA	SHDDI	SHDDU	SHDDE	SHDDO	SHDDA:	SHDDĀ	SHDDĀ:
SHDH	শ্	শ্া	শ্ি	শ্ু	শ্ে	শ্ো	শ্ঃ	শ্ঁ	শ্ঁঃ
SHDDH	শ্ু	শ্ুা	শ্ুি	শ্ুু	শ্ুে	শ্ুো	শ্ুঃ	শ্ুঁ	শ্ুঁঃ
SHN	শ্ন	শ্না	শ্নি	শ্নু	শ্নে	শ্নো	শ্নঃ	শ্নঁ	শ্নঁঃ
SHNN	শ্ন্	শ্ন্া	শ্ন্ি	শ্ন্ু	শ্ন্ে	শ্ন্ো	শ্ন্ঃ	শ্ন্ঁ	শ্ন্ঁঃ
SHP	শ্‌	শ্‌া	শ্‌ি	শ্‌ু	শ্‌ে	শ্‌ো	শ্‌ঃ	শ্‌ঁ	শ্‌ঁঃ
SHPH	শ্‌্	শ্‌্া	শ্‌্ি	শ্‌্ু	শ্‌্ে	শ্‌্ো	শ্‌্ঃ	শ্‌্ঁ	শ্‌্ঁঃ
SHB	শ্‌	শ্‌া	শ্‌ি	শ্‌ু	শ্‌ে	শ্‌ো	শ্‌ঃ	শ্‌ঁ	শ্‌ঁঃ
SHBH	শ্‌্	শ্‌্া	শ্‌্ি	শ্‌্ু	শ্‌্ে	শ্‌্ো	শ্‌্ঃ	শ্‌্ঁ	শ্‌্ঁঃ
SHM	শ্‌্ম	শ্‌্মা	শ্‌্মি	শ্‌্মু	শ্‌্মে	শ্‌্মো	শ্‌্মঃ	শ্‌্মঁ	শ্‌্মঁঃ
SHY	শ্‌্য	শ্‌্যা	শ্‌্যি	শ্‌্যু	শ্‌্যে	শ্‌্যা	শ্‌্যঃ	শ্‌্যঁ	শ্‌্যঁঃ
SHR	শ্‌	শ্‌া	শ্‌ি	শ্‌ু	শ্‌ে	শ্‌ো	শ্‌ঃ	শ্‌ঁ	শ্‌ঁঃ

Table 31 : Cluster ສ SH with vowel, nasal and long sound diacritical marks

Character SH	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
	A	AA	I	U	E	O	Long -	Nasal -	Nasal & Long
	A	AA	I	U	E	O	A:	Ã	Ã:
SHL	ສ	ສາ	ສີ	ສຸ	ເສ	ເສາ	ສຸ່	ສໍ	ສຸ່
SHW	ສ	ສາ	ສີ	ສຸ	ເສ	ເສາ	ສຸ່	ສໍ	ສຸ່
SHS	ສຸ	ສາ	ສີ	ສຸ	ເສ	ເສາ	ສຸ່	ສໍ	ສຸ່
SHSH	ສ	ສາ	ສີ	ສຸ	ເສ	ເສາ	ສຸ່	ສໍ	ສຸ່
SHSS	ສຸ	ສາ	ສີ	ສຸ	ເສ	ເສາ	ສຸ່	ສໍ	ສຸ່

Table 32 : Cluster ष S with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
SS	A	AA	I	U	E	O	A:	Ā	Ā:
SSK	क SSKA	का SSKAA	कि SSKI	कु SSKU	के SSKE	को SSKO	कः SSKA:	कं SSKĀ	कं SSKĀ:
SSKH	ख SSKA	खा SSKAA	खि SSKI	खु SSKU	खे SSKE	खो SSKO	खः SSKA:	खं SSKĀ	खं SSKĀ:
SSG	ग SSGA	गा SSGAA	गि SSGI	गु SSGU	गे SSGE	गो SSGO	गः SSGA:	गं SSGĀ	गं SSGĀ:
SSGH	घ SSGA	घा SSGAA	घि SSGI	घु SSGU	घे SSGE	घो SSGO	घः SSGA:	घं SSGĀ	घं SSGĀ:
SSNG	ङ SSNGA	ङा SSNGAA	ङि SSNGI	ङु SSNGU	ङे SSNGE	ङो SSNGO	ङः SSNGA:	ङं SSNGĀ	ङं SSNGĀ:
SSC	च SSCA	चा SSCAA	चि SSCI	चु SSCU	चे SSCE	चो SSCO	चः SSCA:	चं SSCĀ	चं SSCĀ:
SSCH	छ SSCHA	छा SSCHAA	छि SSCHI	छु SSCHU	छे SSCHE	छो SSCHO	छः SSCHA:	छं SSCHĀ	छं SSCHĀ:
SSJ	ज SSJA	जा SSJAA	जि SSJI	जु SSJU	जे SSJE	जो SSJO	जः SSJA:	जं SSJĀ	जं SSJĀ:
SSJH	झ SSJHA	झा SSJHAA	झि SSJHI	झु SSJHU	झे SSJHE	झो SSJHO	झः SSJHA:	झं SSJHĀ	झं SSJHĀ:
SSNJ	ञ SSNJA	जा SSNJA	जि SSNJI	जु SSNJU	जे SSNJE	जो SSNJO	जः SSNJA:	जं SSNĀ	जं SSNĀ:
SST	ट SSTA	टा SSTA	टि SSTI	टु SSTU	टे SSTE	टो SSTO	टः SSTA:	टं SSTĀ	टं SSTĀ:
SSTT	ठ SSTTA	ठा SSTTA	ठि SSTTI	ठु SSTTU	ठे SSTTE	ठो SSTTO	ठः SSTTA:	ठं SSTTĀ	ठं SSTTĀ:
SSTH	ड SSTHA	डा SSTHA	डि SSTHI	डु SSTHU	डे SSTHE	डो SSTHO	डः SSTHA:	डं SSTHĀ	डं SSTHĀ:
SSTTH	ढ SSTTHA	ढा SSTTHA	ढि SSTTHI	ढु SSTTHU	ढे SSTTHE	ढो SSTTHO	ढः SSTTHA:	ढं SSTTHĀ	ढं SSTTHĀ:

Table 32 : Cluster ऋ S with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
SS	A	AA	I	U	E	O	A:	Ā	Ā:
SSD	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSDD	ॡ	ॢ	ॣ	।	॥	०	ॡ॥	ॡ̄	ॡ̄॥
	SSDDA	SSDDAA	SSDDI	SSDDU	SSDDE	SSDDO	SSDDA:	SSDDĀ	SSDDĀ:
SSDH	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSDDH	ॡ	ॢ	ॣ	।	॥	०	ॡ॥	ॡ̄	ॡ̄॥
SSN	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSNN	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSP	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSPH	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSB	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSBH	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSM	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSY	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥
SSR	ॠ	ॡ	ॢ	ॣ	।	॥	ॠ॥	ॠ̄	ॠ̄॥

Table 32 : Cluster ष S with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
SS	A	AA	I	U	E	O	A:	Ā	Ā:
SSL	स	सा	सि	सु	से	सो	सः	साँ	साँः
SSW	स्व	स्वा	स्वि	सु	से	सो	स्वः	स्वाँ	स्वाँः
SSS	स्य	स्या	स्यि	स्यु	स्ये	स्यो	स्यः	स्यौ	स्यौः
SSSH	स्र	स्रा	स्रि	स्रु	स्रे	स्रो	स्रः	स्राँ	स्राँः
SSSS	स्य	स्या	स्यि	स्यु	स्ये	स्यो	स्यः	स्यौ	स्यौः
SSH	ष	षा	षि	षु	षे	षो	षः	षौ	षौः

Annex-V_Cluster_H Table 32 : Cluster ह H with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
H	A	AA	I	U	E	O	A:	Ā	Ā:
HK	का	का	कि	कु	के	को	काः	काँ	काँ
HKH	क़	क़ा	क़ि	क़ु	क़े	क़ो	क़ाः	क़ाँ	क़ाँ
HG	गा	गा	गि	गु	गे	गो	गाः	गाँ	गाँ
HGH	ग़	ग़ा	ग़ि	ग़ु	ग़े	ग़ो	ग़ाः	ग़ाँ	ग़ाँ
HNG	ङा	ङा	ङि	ङु	ङे	ङो	ङाः	ङाँ	ङाँ
HC	चा	चा	चि	चु	चे	चो	चाः	चाँ	चाँ
HCH	च़	च़ा	च़ि	च़ु	च़े	च़ो	च़ाः	च़ाँ	च़ाँ
HJ	जा	जा	जि	जु	जे	जो	जाः	जाँ	जाँ
HJH	ज़	ज़ा	ज़ि	ज़ु	ज़े	ज़ो	ज़ाः	ज़ाँ	ज़ाँ
HNJ	झा	झा	झि	झु	झे	झो	झाः	झाँ	झाँ
HT	ढा	ढा	ढि	ढु	ढे	ढो	ढाः	ढाँ	ढाँ
HTT	ड़ा	ड़ा	ड़ि	ड़ु	ड़े	ड़ो	ड़ाः	ड़ाँ	ड़ाँ
HTH	ढा	ढा	ढि	ढु	ढे	ढो	ढाः	ढाँ	ढाँ
HTTH	ड़ा	ड़ा	ड़ि	ड़ु	ड़े	ड़ो	ड़ाः	ड़ाँ	ड़ाँ

Annex-V_Cluster_H Table 32 : Cluster ह H with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
H	A	AA	I	U	E	O	A:	Ā	Ā:
HD	ह	हा	हि	हु	हे	हो	हः	हँ	हं
HDD	ऊ	ऊा	ऊि	ऊु	ऊे	ऊो	ऊः	ऊँ	ऊं
HDH	ऋ	ऋा	ऋि	ऋु	ऋे	ऋो	ऋः	ऋँ	ऋं
HDDH	ॠ	ॠा	ॠि	ॠु	ॠे	ॠो	ॠः	ॠँ	ॠं
HN	ऌ	ऌा	ऌि	ऌु	ऌे	ऌो	ऌः	ऌँ	ऌं
HNN	ॡ	ॡा	ॡि	ॡु	ॡे	ॡो	ॡः	ॡँ	ॡं
HP	क	का	कि	कु	के	को	कः	कँ	कं
HPH	ख	खा	खि	खु	खे	खो	खः	खँ	खं
HB	ग	गा	गि	गु	गे	गो	गः	गँ	गं
HBH	घ	घा	घि	घु	घे	घो	घः	घँ	घं
HM	ङ	ङा	ङि	ङु	ङे	ङो	ङः	ङँ	ङं
HY	च	चा	चि	चु	चे	चो	चः	चँ	चं
HR	छ	छा	छि	छु	छे	छो	छः	छँ	छं

Annex-V_Cluster_H Table 32 : Cluster ह H with vowel, nasal and long sound diacritical marks

Character	Vowel Sound Mark						Vowel A & Sound Modifier Mark		
							Long -	Nasal -	Nasal & Long
H	A	AA	I	U	E	O	A:	Ā	Ā:
HL	ह	हा	हि	हु	हे	हो	हः	हां	हां
HW	ह	हा	हि	हु	हे	हो	हः	हां	हां
HS	स	सा	सि	सु	से	सो	सः	सां	सां
HSH	ह	हा	हि	हु	हे	हो	हः	हां	हां
HSS	ख	खा	खि	खु	खे	खो	खः	खां	खां
HH	ह	हा	हि	हु	हे	हो	हः	हां	हां

Annex-VII Evolution Of Scripts In Nepal

Photograph of Dhamalipi(Brahmi) in Lumbini, Nepal



Foto-1

Lumbini(Nepal), the birth place of Shakyamuni Buddha as inscribed in Damalipi(Brahmi) by King Ashoka during his pilgrimage on his 20th year of coronation (3rd century BC).

Photograph of Binyapitaka in Liksabilipi evolved from the Dhamalipi(Brahmi)

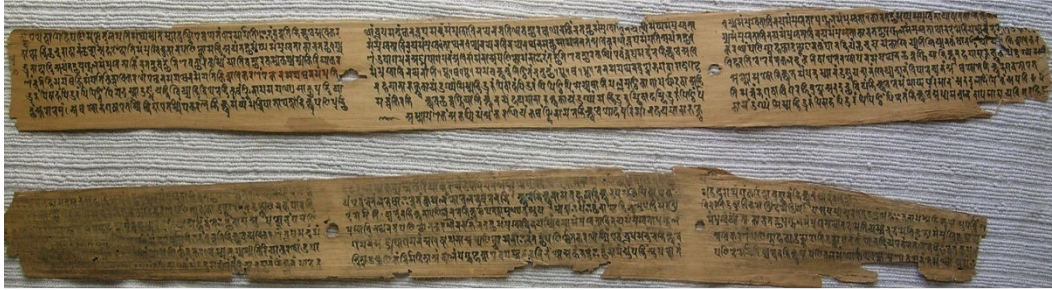


Foto-2

The oldest manuscript on Binayapitaka in Liksabilipi script.

Nepaalalipi is evolved from Liksabilipi script.

Three folios of the manuscript are preserved in
the National Archive, Archeological Department, Government Of Nepal.

Photograph of early evidence of Nepaalalipi derived from Liksabilipi.



Foto-3

Photograph of manuscript of Lankaa-Awataara written in the Nepaalalipi script dated NS 28(AD 908) preserved in the National Archive, Department Of Archeology, Kathmandu, Nepal.

Photograph of Nepaalalipi minted Coin issued by King Jayaprakasha Malla NS 873(1753 AD)



Foto-4

Photograph of a silver coin in Nepaalalipi script issued by King Jayaprakash Malla NS 873(AD1753).

Photograph of 15 scripts inscription on stone

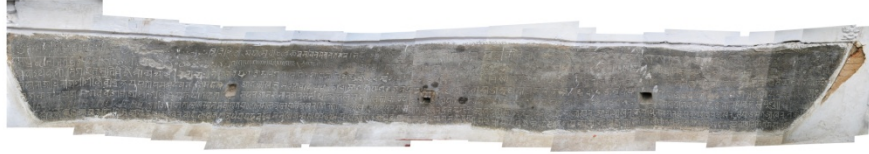


Foto-5

**Photograph of a stone installed at the Royal palace courtyard
by King Pratap Malla encribed in 15 different scripts including
Nepālalipi called Newāraākhara.**

Annex-VI List of included letters and papers

Letter from the Prime Minister of Nepal
Letter from the Nepal Bhasha Academy
Letter from the Vice-Chancellor of Tribhuvan University
Letter from the Vice Chancellor of Lumbini Buddhist University
Letter from the Central Department of Nepalbhasa, Tribhuvan University
Monthly Paper in Nepaalalipi script Lipi Pau, Prachalit Nepal Script Monthly
Annual magazine in Nepaalalipi Pauvaa, Nepāl Lipi Guthi



KATHMANDU
NEPAL

Prime Minister

Acknowledgement

Nepal is a recognized centre for a variety of South Asian manuscripts which provide a rich source of Nepalese culture to the world. It is indeed a great pleasure to see young scholars involved in the preservation and development of Nepalese culture through codification of these manuscripts.

The trio of researchers consisting of **Mr Dev Dass Manandhar**, **Mr Samir Karmacharya** and **Mr Bishnu Chitrakar** has made significant contributions to develop one of the Nepalese scripts "NEPAALALIPi" and to propose this script to be entered in the UNICODE CONSORTIUM, with its headquarters in the USA.

I wish them all the best for the success of their efforts, and hope that more work in this line will follow to bring to light other Nepalese scripts which reflect the historical development of human culture in Nepal.

10 August 2011

Jhala Nath Khanal



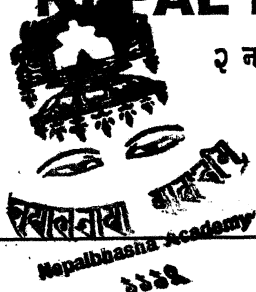
नेपालभाषा अकादमी NEPAL BHASHA ACADEMY

२ नं. वडा, न्यामासिमा, किपू (कीर्तिपुर)

फोन न्या: ४३३४२२२

पौल्या:

न्हि ल्या:.....



To Whom It May Concern

Taking Nepaalalipi(script) with Nepaalabhasaa(language) to UNICODE Consortium and getting Universal Character Code from UNICODE Consortium is a dream of millions of Nepaalalipi lovers all over the world.

Nepaalabhasa Academy had conducted a seminar (Mr. Dev Dass Manandhar had presented a paper) regarding the different aspects of project proposal to enter Nepaalalipi script into the Universal Character Set Code in the UNICODE Consortium.

Presented proposal includes basic alphabets, their sequential order and their application in Nepaalabhasaa(language).

Recognition and inclusion of six new alphabets in the alphabetical list in comparison to UNICODE Debanagari will help to understand the difference between Tibeto Burmese group of languages and other family of languages .

This Project proposal prepared by Mr. Dev Dass Manandhar, Mr. Samir Karmacharya and Mr. Bishnu Chitrakar presents the basic requirements of alphabets and their behavior required in Nepaalabhasaa(language). We wish this project proposal will help UNICODE Consortium to encode NEPAALALIPI with UNIVERSAL CHARACTER CODE number.

Sincerely yours

Satya Mohan Joshi

Satya Mohan Joshi

Chancellor

Nepal Bhasha Academy

Ward No 2, Kirtipur

Kathmandu, Sept 7th, 2011



TRIBHUVAN UNIVERSITY

Kirtipur, Kathmandu, Nepal

OFFICE OF THE VICE CHANCELLOR

December 28, 2011

Recommendation

I am very pleased to learn that serious work is being conducted to document the unique structure of Nepalalipi which is regarded as a major treasure of Nepalese society. It was therefore a great pleasure for me to go through the proposal prepared by a group of Nepalese researchers to enter this script in the UNICODE Consortium. This proposal will also motivate further research on the other unlisted Nepalese script to obtain Universal Character Set in the UNICODE Consortium.

The three young researchers, namely Dev Dass Manandhar, Samir Karmacharya and Bishnu Chitrakar, who have undertaken this important task, certainly deserve appreciation and encouragement. I would like in this context to strongly recommend that the present proposal on Nepalalipi will be assigned the Universal Character Set by the UNICODE Consortium at the earliest date.

Prof. Dr. Hira Bahadur Maharjan
Vice-Chancellor



लुम्बिनी बौद्ध विश्वविद्यालय

लुम्बिनी, नेपाल

Lumbini Buddhist University

Lumbini, Nepal



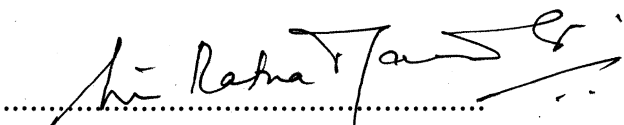
Date : 3 Jan. 2012...

No.

To whom it may concern

I am pleased to know that a serious work has been done by Mr. Dev Dass Manandhar and his friends to document the unique structure of Nepalalipi which is considered to be the main treasure of thousands of Nepali manuscripts deposited in different archival offices of Nepal and abroad. I would like to give emphasis on the point that most of the Buddhist manuscripts of Nepal are written on Nepalalipi, and as such the scholars on Buddhist Studies would be highly benefited, if this script obtains Universal Character Set in the UNICODE consortium. I strongly recommend for the same at the earliest convenience.

Thanking You


.....
(Prof. Dr. Tri Ratna Manandhar)
Vice Chancellor

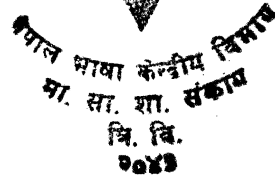


त्रिभुवन विश्वविद्यालय
 TRIBHUVAN UNIVERSITY
 मानविकी तथा समाजिक शास्त्र संकाय
 FACULTY OF HUMANITIES AND SOCIAL SCIENCES
 नेपालभाषा केन्द्रीय विभाग
 CENTRAL DEPARTMENT OF NEPALBHASHA

फोन नं. : ५२६०४९४
 Ph: 5260494

पत्र संख्या:

चैन लाकौल स्मृति भवन
 पाटन संयुक्त क्याम्पस परिसर
 पाटन ढोका, ललितपुर



Date : January 29, 2012

To whom it may Concern

The Central Department of Nepalbhasha is one of the outstanding departments of Tribhuvan University. It is established to run the Post Graduate Degree of Nepalbhasha and to carry out research on Newar (one of the endiginious people of Nepal) and related field . The Department carries study and research on Newar Language, Scripts, literature and Culture. Among the different Newar Scripts, Nepalalipi (one of the Nepalese Scripts) is also one of the important Scripts subject that has to be taught at the post graduate level .

To enhance the study on Nepalalipi, last year the department had conducted two outstanding seminars in this subject. Mr. Dev Dass Manandhar, Mr. Samir Karmacharya and Mr. Bishnu Chitrakar had presented the papers on different aspects of Nepalalipi . Recognition of prime alphabets, vowel diacritical marks and the collation order of alphabets of Nepalalipi were discussed in the seminars. They had analysed and presented Nepalalipi in a very logical and clear format. The paper on Nepalalipi proposed to uncode Nepalalipi in UNICODE was presented by Mr. Dev Dass Manandhar.

I am pleased to learn that the outcomes of these presentations will be a basis for a project proposal to enter the Universal Character Set Code to be approved by UNICODE Consortium. I look forward to your kind attention to this matter.

Sincerely yours

Prem Shanti

Prof. Prem Shanti Tuladhar

Head

Central department Of Nepalbhasha



का.जि.का.द.नं. १११/०४१/०४६

पौजा ४

प्रचलित नयाल लियिया सलार्थो

प २६ प्या ६० न सं ११२६ कछलाथ यान् म् १५ (मिंयागका)

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यिकाक

नयाल लियि शुधिया
यशन साश्चनि, थं
शन २५०१०३

थाकु

बुद्धी अक्षर घस

अनामनशन

शन प्या ४ ४१११४४६

मुख नाथयिनाप्रमाणाः नव मुखलि चनाः काय मबल
 कुल्लय चिल्लयां लः गियाः माःकथया ससाःकासाः यानाः न
 लीं न्ना अयाः नत्ताः काय मबल
 मिः न्ना अयाः नत्ताः काय मबल

मसु नाथयिनाप्रमाणाः नव मुखलि चनाः काय मबल
 कुल्लय चिल्लयां लः गियाः माःकथया ससाःकासाः यानाः न
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 मिः न्ना अयाः नत्ताः काय मबल

खसि वाः नाल



माया मंद माया कनाय नानन
 भावनि न गिगः थियारल
 माया कनाय नानन
 भावनि न गिगः थियारल

गुना को-ऑपरेटिव

गुना को-ऑपरेटिव
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Guna Co-operative Ltd.
Guna Co-operative Ltd.

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Guna Co-operative Ltd.
Guna Co-operative Ltd.