# Proposal to encode BHARATHI in UNICODE 

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## 1 INTRODUCTION

This is a proposal to encode the BHARATHI script created by TK Ramchand in 1994 in Unicode. This document provides a description of the writing system, code charts and names list, character properties, specimens that illustrate letterforms and usage, and copies of some documents and paper cuttings.
BHARATHI is not a language. It is just a phonetic common script for transliteration of any language.

## 2 BACKGROUND

'BHARATHI' was invented in 1994 by TK Ramchand, when there was a call from the upper echelons, for a common script, for all the Indian languages. It was presented to the then government of India. But, for reasons unknown, the idea vanished. Finding no way to get popularised, till 2020 it was lying in a dormant state, awaiting a death imminent. Everybody who came to know of the script praised the peculiarities of the script.
Under these circumstances Ramchand was searching for a way to save the script from a possible demise. In 2020 he succeeded in creating a Font for the script. It is a Font, free for all, downloadable from the site:
bharathibyramchand.wordpress.com
Literature about the script is also available for downloading from the same site.
Quick reference guides for enabling typing in BHARATHI script are also there for downloading. Four videos on BHARATHI script are also available on YOUTUBE and some other channels.
Now it has recovered from the disease of "no publicity"! The younger generation has embraced it whole heartedly! They use it for sending letters to friends. It is picking up quickly!
This application to get it recognized by UNICODE too is a part of the struggle in saving it for the future generation. Any language anywhere in the world having no script of its own, are free to adopt BHARATHI as their script. It is felt that it is the duty of all human beings, to preserve the script which has a lot of progressive beneficial features which no other language in the world possess.
If it is found that BHARATHI doesn't fit into the present day rules of the UNICODE, it is requested to consider BHARATHI as a special case and to give it exemption from them!

It may be easy to cremate, but it is too difficult to create!

## 3 SCRIPT DETAILS

### 3.1 Script name <br> The name of the script is BHARATHI!

### 3.2 Structure

BHARATHI script is written from left to right. BHARATHI alphabet is unicase._It does not have a case distinction.
Vowel letters are compounded using vowel signes.. It has a lot of unique beneficial peculiarities of its own.
a. $\boldsymbol{\rho}$ This is the BODY of all vowels. No sound is assigned to it. So this may be considered as a symbol.
 when attached to the body make them the concerned vowels like these.

## 今口 fof 서 fof <br> ค우 아 م엉

The same tails when attached to the consonants becomes diacritics that give the particular vowel effect to them.

This system brings in a reduction of $\mathbf{1 7}$ characters from the total number of characters of the script.
b. There are no separate symbols for numerals in BHARATHI. These selected tails when they stand alone, without vowel BODY or consonants, they turn into numerals.


This system brings in a reduction of $\mathbf{1 2}$ characters from the total number of characters of the script.
c. There are no separate compound letters in BHARATHI. All compound letters are formed.

This system brings in a reduction of at least 64 characters from the total number of characters of the script.
Thus the total number of reduction of characters in BHARATHI script comes to 93.
d. If any language requires more vowel characters or consonant characters to accommodate their spoken sounds, provision is there to create new characters just by adding diacritics to them.
 body of the vowels. If necessary, combination of diacritics is also possible.

For creating new consonants, this diacritic むcan be added to the 35 consonants left out. Already five CHILLU letters are made like this.

If still more consonant letters are necessary this diacritic $\boldsymbol{\hbar}$ can be added to all the 40 consonants. There are provisions for creating even more new consonants if necessary. So a letter is there handy, to represent any spoken sound of any language. Since the new letters are all formed with already UNICODE encoded symbols and consonants, no more new encoding will become necessary.
e. Learning one letter paves the way for writing two to four other letters of the same group. Just turning the first consonant upside down, gives the next one, turning that one left to right gives the next one, again turning it upside down gives the next of the same group!
f. No marks, dot or streak are to be made above, below, left or right of any letter of the alphabet.
g. No letter has any portion projecting upwards or downwards, no difference in heights of the letters, all letters are of the same height.
h. A peculiar kind of contour is given to all the alphabets, notations and numerals, enabling the writing of the letters of a word continuously, without any break. There is no need to write each letter separately.
i. Diacritics are to be placed only on the right side of the letter.
j. As the selected diacritics themselves turn into numerals, there is no botheration of learning it separately.
k. A special guide to easily type any language in BHARATHI script is prepared and published for the benefit of those interested internationally.

### 3.3 Character Repertoire

Symbol for BODY of all vowels 1, Symbols for vowels 18, Consonants 40, symbol for compounding consonants 1, symbol for doubling consonants 1, symbols for multiple purposes 4 and punctuation marks 6 ( as they do not appear at the usual places but at the centre of the height of the letters) the total number of characters comes to 71 .
The following tables show the dependent vowel letters and the corresponding independent vowel signs (diacritics) of the BHARATHI script.
a.

No Monophthongs
Only symbols for making vowels are independent

| Vowels <br> are made <br> by adding <br> BODY and <br> TAIL | Short |  |  | Vowels <br> not inde- <br> pendent. <br> They are <br> formed. | Indep- <br> endent <br> vowel <br> sign | Lowels <br> Depend- <br> ent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## b. Diphthongs

| Diphthongs |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Not <br> Independent but formed | Vowel sign <br> Independent | Dependent <br> Example |
| AI | $P \frac{1}{3}$ | $\frac{1}{3}$ | $\operatorname{lef}_{3}$ |
| AU | $p\}^{3} \mathrm{AU}$ | $7$ | $\operatorname{lf}^{3} \mathrm{PAU}$ |

## c. Anusvaram



## d. Visargam



When writing BHARATHI, the symbol for the first vowel ( ) need be used only when that letter stands alone. When it is followed by another letter in a word, it can be avoided as it would then automatically emerge.

Varga consonants

|  | Voiceless |  | Voiced |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unaspirated | Aspirated | Unaspirated | Aspirated | Nasal |
| Velar | $\int_{K A}$ | $\int_{K H A}$ | $\mathscr{F}_{\mathrm{GA}}$ | $\overbrace{\mathrm{GHA}}$ | NGA |
| Postalveolar or Alveolopalatal | $8_{C A}$ | $\theta_{\mathrm{CHA}}$ | $\boldsymbol{\delta}_{\mathrm{JA}}$ | $\sqrt{0}_{\mathrm{JHA}}$ | S NYA |
| Retroflex | $\Theta_{\text {TTA }}$ | $\boldsymbol{\gamma}_{\mathrm{TTHA}}$ | $\delta_{\mathrm{BDA}}$ | $\boldsymbol{2}^{\text {DDHA }}$ | $\delta_{\text {NNA }}$ |
| Dental | $\mathcal{F}_{\mathrm{TA}}$ | $\mathcal{E}_{\text {THA }}$ | $\int_{\text {DA }}$ | DHA | $2_{N A}$ |
| Labial | $\ell_{P A}$ | $\sigma_{P H A}$ |  | $\vartheta^{6}$ | $\delta_{\text {MA }}$ |

f. Other consonants

| 8 SA | of RA | 6 LA | $9{ }^{9} \mathrm{VA}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{\theta}_{\mathrm{SHA}}$ | $\theta_{\text {sSA }}$ | $g^{2} S_{A}$ | Of\% |  |
| OOLLA | $\boldsymbol{\theta}_{\text {LLLA }}$ |  | $\Theta^{\circ}{ }_{\text {NNNA }}$ |  |
| $\Omega_{F A}$ | $)^{\text {ZA }}$ | $W_{\text {huum }}$ | flaung | $\mathcal{U}_{\text {and }}$ f <br> (used as diacritics too) |


| g. Chillu letters |  |  |
| :---: | :---: | :---: |
| Letter | Unicode name | Base |
| da | CHILLU NN | $\text { nNA }{ }^{\circ}$ |
| 9\% | CHILLU N | nnna 96 |
| Bot | CHILLU RR | $\text { RRA } 3$ |
| $60 \%$ | CHILLU L | $\text { LA } 8$ |
| $60 \%$ | CHILLU LL | LLA 60 |

CHILLU letters are not independent. They are formed from the consonant letters that do have spoken sound similarity, using the diacritic むmeant for that purpose. $_{\text {m }}$
h. Adding vowels to consonants

Already, the consonants are having the first vowel 'A' attached to it. From, 'AA' onwards, to get the consonants having the other vowels attached to it, we have to add the same symbols with which we made the vowels, by adding them to the Body of vowels. When we add the symbol, the consonant will fist shed its ' $A$ ' voweleffect and then accept the new role as shown here.

| KA | KAA | KI | KII | KU | KUU | KR | KE | KRR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | QR | 2\% | 288 | Q\% | Q8 | Q ${ }^{\text {d }}$ | Q 5 | Qช |
| KEE | KAI | KO | KOO | KOU | KAM | KH | KL | KLL |
| 2 L | $2{ }^{2}$ | 27 | 2, | 2,7 | Q $\theta$ | 2\% | Q8\% | Qt |

Similarly all other consonants too may be transformed.

## i. Making compound letters

There are no compound letters in BHARATHI! All compound letters are formed. It was earlier mentioned that the consonants have the first vowel (A) already added to it. To get a compound letter, first we have to shed the vowel-effect of the first letter, by adding this compound letter formation symbol. For example, when this symbol is added to the letter $\boldsymbol{Q}^{\boldsymbol{\sim}}$ (KA), it sheds its vowel effect(A) and becomes - $)$ f(K:). Now, for example, let us add $\mathcal{F}$ (TA) as the next letter, it becomes the compound letter $\left.{ }^{0}\right)^{\prime} \mathcal{Z}($ K:TA). Similarly any compound letter can be formed.

## j. Doubling a consonant letter

For doubling a letter we need not do as we make compound letters. Just by adding the symbol ${ }^{\text {Y }}$ for doubling, we get it easily! For example to double the letter $\mathcal{R}($ NYA ), the doubling effect can be obtained by just adding this $\boldsymbol{\eta}$ symbol to it. Then it becomes the double letter ${ }^{\circ} \mathfrak{?}$ (NYNYA).
[By the way, remember, that letters of words ending with vowel-less sound, also may be made like this 0 括 7 (BOOK). It was mentioned before the beginning of consonants, that the consonants are already having the first vowel $(A)$ attached it. This is $\boldsymbol{\delta}(\mathbf{B A})$, when thisz symbol is added to it, it becomes $\boldsymbol{\delta} \boldsymbol{\delta}(\mathbf{z U})$. This is $\boldsymbol{\sim}$ (KA). When this 7 symbol is added to it, it becomes $\boldsymbol{D}^{\circ} \boldsymbol{7}$ (ККА). When they are added they



## k．Numerals

These selected diacritics turn numerals when they themselves stand alone

#  <br> 0123456789100010,000 

The numerals on the keyboard give numerals in BHARATHI too．Numerals remain numerals as long as they themselves standalone，but when they in combination stand with body of vowels，and consonants，they give the corresponding letters．No


I．Dates can be written like this

机1阬1
15．08． 1947

26．01． 1950
d木1P71d？
15．09． 1931
m．Numbers can be written like this：

## 

## 1，380，004，385

## n．Punctuation marks

1 The peculiarity of these punctuation marks are that they appear at a level at the middle of the height of the letters rather than the bottom level． The other punctuation marks appear as usual in many other languages．

## 19

How these two punctuation marks appear can be seen in the just above numerals section．
o．Jest a look at how BHARATHI appears in a document
The written－whole is having a coherent effect．They really present a visual treat in pleasing the eyes．They do not appear as a group of harmony－less elements of diversity strange，haphazardly distributed in space！

# 'BHARATHI' was invented in 1994 by <br> TK Ramchand, when there was a call from the upper echelons, for a common script, for all Indian languages. <br> Transliteration of the above English sentence is given below in BHARATHI script. <br> <br>  <br> <br>     

JANA GANA MANA..... NATIONAL ANTHEM IN COMMON SCRIPT<br>"BHARATHI 1994" INVENTED BY RAMCHAND<br><br>   etzifits utupqg suter corat <br><br><br>Gfots 及etrs coff<br><br>Qrofe uprof elspol<br>TREbt<br>TR

p. Guide to write BHARATHI letters

BHARATHI letters are written from left to right. The arrow marks inside the letters will guide how to write the letters.


## 4. PROPOSED ENCODING

A total of $\mathbf{7 1}$ characters are proposed for encoding:

### 4.1 Vowel letters

No vowel letters are proposed for encoding. There is no independent vowel letter. All vowel letters are formed. When the BODY of vowels and the TAIL (Diacritics) symbol of the concerned vowel are joined together it becomes the vowel letter.
So, a symbol called BODY of the vowels which has no sound assigned to it, needs Encoding.

## $p$ <br> BHARATHI BODY OF VOWELS SIGN HAVING NO SOUND 1

### 4.2 Vowel signs

Eighteen independent vowel signs (TAILS) are proposed for encoding:

- BHARATHI VOWEL SIGN A
d BHARATHI VOWEL SIGN I
$\boldsymbol{\delta}$ BHARATHI VOWEL SIGN U
あ
BHARATHI VOWEL SIGN R
9 BHARATHI VOWEL SIGN L
5 BHARATHI VOWEL SIGN E
2 BHARATHI VOWEL SIGN O
$\frac{1}{3}$
BHARATHI VOWEL SIGN AI
$\theta$
BHARATHI VOWEL SIGN AM
f BHARATHI VOWEL SIGN AA

BHARATHI VOWEL SIGN II
$\uparrow$
BHARATHI VOWEL SIGN UU

BHARATHI VOWEL SIGN RR
6 BHARATHI VOWEL SIGN LL
t) BHARATHI VOWEL SIGN EE

ใ BHARATHI VOWEL SIGN OO
3 BHARATHI VOWEL SIGN AU
$\square^{\circ}$ BHARATHI VOWEL SIGN AH

### 4.3 Consonants

BHARATHI is at present having 40 consonant letters.
More consonant letters, according to the necessity of a language can be formed, using the special diacritics. Consonants thus newly formed will not require another encoding, as they are not a single whole, but made up of two parts already encoded.

40 consonant letters are proposed for encoding:

BHARATHI CONSONANT LETTER KA

- bharathi consonant letter GA
$\underbrace{}_{\text {bharathi consonant letter gha }}$
(8HARATHi consonant Letter nga
9 bharathi consonant letter ca
- bharathi consonant letter Cha
$\widehat{0}_{\text {bharathi consonant letter ja }}$

BHARATHI CONSONANT LETTER JHA
§bharathi consonant letter nya Qbharathi consonant letter tta $\boldsymbol{\sigma}_{\text {Bharathi consonant letter ttha }}$ $\wp_{\text {bharathi consonant LeTter dDa }}$ $\boldsymbol{\Omega}_{\text {BHARATHI CONSONANT LETTER DDHA }}$ $\int_{\text {bharathi consonant letter nna }}$ $\mathcal{F}_{\text {bharathi consonant letter ta }}$ $\hat{S}_{\text {bharathi consonant letter tha }}$ $\underbrace{}_{\text {bharathi consonant letter da }}$ $\delta_{\text {BHARATHI CONSONANT LETTER DHA }}$ $\sigma_{\text {Bharathi consonant letter na }}$
$\boldsymbol{e}_{\text {bharathi consonant letter pa }}$ $\sigma_{\text {bharathi consonant letter pha }}$ $\boldsymbol{\delta}$ bharathi consonant letter ba $\vartheta_{\text {bharathi consonant letter bha }}$ §bharathi consonant letter ma $\overbrace{\text { BHARATHI CONSONANT LETTER YA }}$ ठbHARATHI CONSONANT LETTER RA $\boldsymbol{\sigma}_{\text {BHARATHI CONSONANT LETTER LA }}$ $\boldsymbol{\rho}_{\text {bHARATHI CONSONANT LETTER VA }}$ $\int_{\text {bharathi consonant letter sha }}$ $\boldsymbol{\sigma}_{\text {BHARATHI CONSONANT LETTER SSA }}$ $\boldsymbol{g}^{2}$ bHARATHI CONSONANT LETTER SA fbharathi consonant letter ha $\mho_{\text {bharathi consonant letter lla }}$ $\Theta_{\text {BHARATHI CONSONANT LETTER LLLA }}$ $\boldsymbol{\theta}_{\text {BHARATHI CONSONANT LETTER RRA }}$ $\oint_{\text {BHARATHI CONSONANT LETTER NNNA }}$ of BHARATHI CONSONANT LETTER TTTA OR $\boldsymbol{R}_{\text {bharathi consonant letter fa }}$ ひुbharathi consonant letter Za

### 4.4 Special diacritics

## Six special diacritics of BHARATHI are proposed for encoding:

## 4 <br> BHARATHI MULTI PURPOSE DIACRITIC SYMBOL 1

BHARATHI MULTI PURPOSE DIACRITIC SYMBOL 2

BHARATHI MULTI PURPOSE DIACRITIC SYMBOL 3

BHARATHI MULTI PURPOSE DIACRITIC SYMBOL 5

A
BHARATHI MULTI PURPOSE DIACRITIC SYMBOL 6 All of these $\boldsymbol{7} \boldsymbol{\not} \boldsymbol{t} \| \mathbb{f}$ do have multiple roles as and when the situation demands in each language.
$\boldsymbol{f}$ This symbol is used to make compound consonant letters as previously explained. It is used to silence vowel sounds. It can be used to create new vowel, by adding it to the BODY of vowels.
$\boldsymbol{7}$ This symbol is used to double a consonant letter as previously shown. It can be used to create a new vowel letter, by adding it to the BODY of vowels.

あ This symbol is used in creating new consonant letters as previously shown. This can be used to create a new vowel too, by adding it to the BODY of vowels.

## t

This symbol can be used to create more consonant letters by adding to the selected consonant letters, if the language requires. It can also be used to create a new vowel letter if necessary, by adding it to the BODY of the vowels.
f This can be used to create consonant letters. It can be used to create a vowel sound by adding it the BODY of vowels. It can even stand alone as a consonant if it is not already used as a diacritic in the language.
\& This can be used to create consonant letters. It can be used to create a vowel sound by adding it the BODY of vowels. It can even stand alone as a consonant if it is not already used as a diacritic in the language.
$\mathfrak{t} \| \in$ These diacritics may be entrusted with any new duty too if necessary.

### 4.5 Digits

There is no proposal to encode digits in BHARATHI:
As these selected diacritics when they themselves stand alone, turn into numerals no digits are to be encoded as they had been already included as diacritics.

0123456789

### 4.6 Punctuation marks

6 punctuation marks of BHARATHI are proposed to be encoded:
V Vertical line full stop
-
Dot full stop

9
Comma

Dash

They are proposed for encoding as their position in the script is not the usual position at the bottom, as seen in many languages. In BHARATHI they appear at a place at about the middle of the height of the letters as seen below.

7. BHARATHI FONT


## BHARATHI FONT



# BHARATHI TYPING GUIDE INTERNATIONAL! 

BHARATHI IS A SCRIPT WITH<br>WHICH ANY WORLD LANGUAGE CAN BE WRITTEN ACCORDING TO THE SOUND, THE SPOKEN VOICE PRODUCE!

Download Font, Free From The Site: bharathibyramchand.wordpress.com

Learn BHARATHI 1994 as a hobby!
For getting letter in BHARATHI script, representing a voice like that: as ' $a$ ' in ' ${ }^{\text {t }}$ ', type lower case ' $a$ ' and ' $s$ ' on the keyboard. as ' $a$ ' in 'art', type lower case ' $a$ ' and ' 0 ' the numeral on the keyboard. as 'i' in 'it', type lower case ' $a$ ' and ' 1 ' the numeral on the keyboard. as 'ou' in 'out', type lower case ' $a$ ' and ' $=$ ' symbol on the keyboard. as 'um' in 'umbrella', type lower case 'a' and 'd' on the keyboard.

| Character | KEY to be PRESSED ON kEYBOARD | Details about the vocal voice sound, the letter represents | Character | KEY TO BE PRESSED ON KEYBOARD | Details about the vocal voice sound, the letter represents |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $p$ | $a$ | SILENT. NO SOUND ASSIGNED TO IT | $\rho$ | a | SILENT. NO SOUND ASSIGNED TO IT |
| 8 | aS | (A) as 'a' in ' $\mathrm{at}^{\prime}$ ' | pot | a0 | (AA) as 'a' in 'art' |
| pod | a1 | (I) as 'i' in 'it ${ }^{\text {' }}$ | pof | a2 | (II) as 'ea' in 'eat' |
| POt | a3 | (U) as 'o' in 'to' | $89$ | 24 | (UU) as 'oo' in 'too' |
| ค\% | 25 | (R) (Vocolic R) as 'ero' in 'zero' | ค里 | aX | (RR) (Vocolic RR)as 'eroo' |
| P\% | $a P$ | (L) (Vocalic L) as ' ilo' in 'kilo' | $p \%$ | $a Z$ | (LL) (Vocalic LL) as 'iloo' |
| $805$ | a6 | (E) as 'e' in 'enter' | Pot | a7 | (EE) as 'a' in 'agent' |
| $80\}$ | a9 | (O) as 'o' in 'omit' | P? | a- | (OO) as 'o' in 'order' |
| $\mathrm{PO}_{3}$ | a8 | (AI) as 'i' in 'idea' | $\rho \partial$ | $a=$ | (AU) as 'ou' in 'out' |
| $\rho 0 \theta$ | ad | (AM) as 'um' in 'umbrella' | م\%: | af | (AH) as 'u'as in 'utter' |

For getting letter in BHARATHI script, representing a voice like that: as ' $c$ ' in 'cup', type lower case ' $g$ ', on the keyboard.
as (kha), the same ${ }^{2}$ / ASPIRATED as in 'MUKHAM' the Sanskrit word for 'Face', type lower case ' $h$ ' on the keyboard.
as 'bu' in 'but', type UPPER CASE ' $A$ ', on the keyboard.
Consonants have the first vowel ' $a$ ' already added to it! (In the chart below, UNICODE name is given in green colour)

| Character | KEY TO BE PRESSED ON KEYBOARD | Details about the vocal voice sound, the letter represents |
| :---: | :---: | :---: |
| 0 | $g$ | (KA) as 'c' in 'cup' (Gutteral) |
| 08 | h | (KHA) as the same $\boldsymbol{Q}_{\text {(KA) ASPIRATED as in 'MUKHAM' }}$ the Sanskrit word for 'Face' (Gutteral) |
| $\theta$ | J | (GA) as 'ga' in 'mega' (Gutteral) |
| 8 | k | (GHA) as the same $\boldsymbol{C}_{(G A)}$ ASPIRATED, as in 'MEGHAM' the Sanskrit word for cloud' (Gutteral) |
| 8 | 1 | (NGA) as 'ng' in 'song'(softened without stress) (Gutteral) |
| 9 | 9 | (CA) as 'cha' in 'challenge' (Palatal) |
| 8 | W | (CHA) as the same $\overbrace{\text { (CA) ASPIRATED (Palatal) }}$ |
| 16 | e | (JA) as 'j' in 'jungle' (Palatal) |
| $v^{2}$ | $r$ | (JHA) as the same ${ }^{\text {(JA) ASPIRATED ( }}$ (Palatal) |
| \%) | t | (NGA) (Palatal) |
| 0 | $y$ | (TTA) as 't' in 'town'(Cerebral) |
| $\delta$ | U | (TTHA) as the same $\ell^{(\text {(TTA) ASPIRATED ( }}$ (Cerebral) |
| 8 | i | (DDA) as 'd' in 'dull' (Cerebral) |
| $V^{2}$ | 0 | (DDHA) as the same ${ }^{\circ}$ (DDA) ASPIRATED (Cerebral) |


| 0 | P | (NNA) as 'nn' in 'connect' (Cerebral) |
| :---: | :---: | :---: |
| 8 | Z | (TA) as 'thu' in 'thumb' (Dental) |
| 3 | X | (THA) as the same $\mathcal{F}$ (TA) ASPIRATED (Dental) |
| 8 | C | (DA) as 'th' in 'that' (Dental) |
| 8 | V | (DHA) as the same (DA) ASPIRATED (Dental) |
| 2 | b | (NA) as 'na' in 'nadi' the Sanskrit word for RIVER (Dental) |
| $\rho$ | n | (PA) as 'pu' in 'punch' (Labial) |
| 6 | m | (PHA) as the same $\boldsymbol{P}$ (PA) ASPIRATED (Labial) |
| $\delta$ | A | (BA) as 'bu' in 'but' (Labial) |
| 90 | S | (BHA) as 'BHA' in the name of the book 'BHAGAVATH GEETHA' in Sanskrit (Labial), as the same (BA) ASPIRATED |
| 8 | D | (MA) as 'mu' in 'mud' (Labial) |
| 8 | F | (YA) as 'ye' in 'yet' (Semi-Vowel) |
| O | $G$ | (RA) as 'ra' in 'parapet' (Semi-Vowel) |
| 68 | H | (LA) as 'la' in 'palanquin' (Semi-Vowel) |
| 9 | J | (VA) as 'wo' in 'wonder' (Semi-Vowel) |
| 0 | K | (SHA) as 'SA' in the name 'SAKUNTALA' in Sanskrit. (Silibant) |
| 80 | L | (SSA) as 'shu' in 'shut': (Silibant) |
| 82 | $Q$ | (SA) as 'su' in 'supper' (Silibant) |
| df | W | (HA) as 'hu' in 'hut' (Aspirate) |
| 00 | E | (LLA) as 'lla' in 'collar' |


| 06 | R | (LLLA) as 'zha' in Pu'zha', Malayalam for RIVER (Pronounce with rolled up tongue.) |
| :---: | :---: | :---: |
| $B$ | T | (RRA) as 'RA' in ARABI or 'ru' in 'ru'n |
| 88 | Y | (NNNA) as 'nu' in 'nut': (True Dental) |
| 8 SO | U | (TTTA) as 'Ta' as in 'Ta-ta' |
| 28 | I | (FA) as 'f' as in 'fun' |
| $\bigcirc$ | 0 | (ZA) as 'z' as in 'zıoo' |
| 4 | N | as 'huum' (Only for languages havig that sound) Otherwise behaves like a special diacritic. |
| A | M | as 'aung' (Only for languages havig that sound) Otherwise behaves like a special diacritic. |
| Ht | p[ | CHILLU (NN) (Formed letter) as 'n' in 'fuñ'. Bace ${ }^{\text {d (NNA) }}$ |
| 勺\% | H[ | CHILLU (L) (Formed letter) as 'ill' in 'ill'. Bace ${ }^{\text {Of(LA) }}$ |
| Bot | T[ | CHILLU (RR) (Formed letter) as 'r' in 'car'. Bace $\boldsymbol{B l}_{\text {(RRA) }}$ |
| eft | Y[ | CHILLU (N) (Formed letter) as 'in' in 'in'. Bace ${ }^{\text {P }}$ (NNNA) |
| 601 | E[ | CHILLU (LL) (Formed letter) as 'II' in 'full'. Bace $\mathbf{0}$ (LLA) |

## Videos on BHARATHI script can be had from:

https://youtu.be/W7Aa2AOAdO8
https://youtu.be/Av70UApvCaw https://youtu.be/JJO_ifNlxys
https://youtu.be/LRAz4FkIG9Q
Literature on BHARATHI script can be downloaded from: https://archive.org/details/@thinker_enlighten https://pothi.com/pothi/\#
Project Gutenberg Self-Publishing Press
Fonts can be downloaded free from:
bharathibyramchand.wordpress.com
Font for Windows and Mac can be got free from:
ramchandtk@gmail.com
by email.

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TRIVANDRUM
Date.17-5-1995

## TO WHOM IT MAY CONCERN

I have gone through the article "Bharathi - A Common Script For All Indian Languages" written by Sri. T. K. Ramchand. The advantage of having a common script for all the Indian languages, are many fold. Since all the Indian Languages have a good number of features in common, if a common script is adopted it is possible for all literate Indians to understand the written and printed materials of the languages of India in varying degrees.

As the author has rightly perceived, a common script will facilitate to create better understanding amongst the different linguistic groups of our country. In this era of computer technology, having a common script for all the Indian languages, will be helpful, for the less spending of time and human energy and also it is highly useful even from the economic point of view.

It is quite glad to know that the author has invented a new script system termed "Bharathi" in accordance with cultural ethos of the Indian people. The letters of Bharathi Script appears to be very attractive from the aesthetic point of view. The Bharathi has the advantage of representing the phonemes of all Indian languages. Even if some new phonemes are developed in future, The Script System of Bharathi is capable enough to accommodate them also. The author's sincerity for the cause and the amount of hard work he has put in for the invention of a common script called 'Bharathi' are to be highly commented and the author deserves full encouragement. I hope the author's research for having a common practical script system, useful both for printing and writing, will eventually succeed. Hence I am of the opinion that the author is to be encouraged to pursue further research in the field by giving full consideration to the principles of Orthography.
(Signed)
Prof. G. K. Panicker.
(TRUE COPY)
(The original being faded, to make reading easy, it is given retyped here. For authenticity sake the original too is re-produced below.)

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Date..77-5-1.995.

## 

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Dr. G. K. PANIKKAR
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Prof.G.K.Panicker.

## BHARATHI common symbol for all the vowels! PNG image



## 71 BHARATHI CHARACTERS PROPOSED FOR ENCODING（PNG image） ค  <br> ఇ ઈそァŋ <br> 8ல\&8 <br> 1., ; : -

Contd．．．．．．

4 THE HINDU, Friday, April 15, 1994


The Union Home Minister, Mr. S. B. Chavan, releasing a Hindi book 'Madhur Muskan' (a translation of Tamil short stories) at a function in Madras on Thursday. Others in the pleture are (from left) Mr. K. A. P. Viswanatham, the former President, Mr. R. Venkataraman, and the book translator, Mr. T. S. K. Kannan.

## Chavan commends plan for common script

## From Our Special Correspondent <br> MADRAS, April 14.

(1) Mr. S. B. Chavan, Enton Home Mintster, today commended a suggestion for a common script for all languages in the country. Being a sensitive subject the job of evolving a common script could not be entrusted to the Government. It would only create more problems instead.
|| Let non governmental organisations take interest in the matter and the Government would favourably consider extending whatever finan1) cial assistance was required in this task, he said, citing an experiment conducted in this respect in Gujarat earlier.
Mr. Chavan was participating in the valedictory of a two-day conference of Tamil and Hindi scholars focussing on the theme of national integration organised to celebrate the 95th birthday of the Tamil scholar, Mr. K. A. P. Viswanatham, at Adarsh Vidyalala, Royepettah.
) The suggestion for a common script for the languages came from the former President, Mr. R. Venkataraman, who referred to the growing conflicts in the name of language, religion and
castes. He regretted that 'we do not think in terms of Indian and Indianness,' The need of the hour was national unity and national consclousness. All religions only preached love and brotherhood and there was no need for communal disharmony.
Tributes to Viswanatham

It may not be appropriate to construe that Hindi in its role as official language of the Union was in conflict with any other regional language or vice versa; it was appropriate that the State administrations use their own respective official languages and Hindi, he said.

Mr . Chavan pointed out that a feeling of attachment towards one's own language was a universal human tendency. To foster positive tolerance and appreciation towards other languages, such conferences should be held in other cities so that the growth of languages through assimilation of other languages was discussed and propagated.

The promotion and spread of Hindi language was required to be done in such a manner that It served as a medium of expression for all the elements of the composite culture of India.
Tamil language, he said, occupied a prominent position among the most ancient languages of the country. Tamil and its literature is a repository of world literature and a pride of our nation.' The works of Subramania Bharathi are the hall mark of the country's freedom struggle and a source of patriotic inspiration for the people, he said.

## Funds sought to enrich Tamil

Mr. Viswanatham dwelt on the glory of Tamil and said the Centre should come forward to allocate sufficient funds to further enrich it. He


Ms. R. V. Padmavathi being awarded a gold medal by Justice Ranganath Mishra, Chairman, National Human Rights Commission, New Delhi, at the sixtieth annual convocation at Dakshina Bharat Hindi Prachar Sabha, Madras, on Saturday. Dr. B. D. Jatti, former Vice-Presient of India, looks on.

## Common script suggested for all Indian languages

From Our Staff Reporter
MADRAS, Feb. 24.
Acceptance of a common script for all the Indian languages over a period of time can help people gain proficiency in various, languages, Mr. Ranganath Misra, Chairman. National Human Rights Commission said here today.

Once a common script was accepted, it would be possible for people to get acquainted with the literature in other languages which ultimately would result in a composite culture. At the same time, it would not work as an impediment to the development of languages other than Hindi. It would also help to impress upon people about the homogeneity of the country and contribute to National integration. The common script could emerge as a force which would hold the country together.

Mr. Misra was delivering the 60th annual convocation address of the Dakshina Baharat Hindi Prachar Sabha here.

Though Article 351 of the Constitution provided for a directive for the development of Hindi, it had not been properly appreciated and taken care of over the years. Some apprehension arose over this article which worked as an impediment in the spread of the language. If the spirit of Article 351 had been understood. Hindi would have become sufficiently popular in nonHindi speaking areas.

The spread of Hindi should be expedited in the South where it faced some obstacles. But this should not be at the cost of the local languages. The Hindi Prachar Sabha could play a vital role in this respect, he said lauding its achievements in the propagation of Hindi. The Sabha was an institution of National importance. Even before independence, Hindi was made popular in the South through the efforts of this institution, he
added. In his Presidential address, Dr. B. D. Jatti, former Vice President, sald South Indians should be favourably disposed towards Hindi. The country's unity and integrity would be kept alive only through the compromises made by its citizens. The history of the Hind Prachar Sabha, which was founded by Mahathma Gandhi, was still admirable, he said. "Any service oriented gesture was neither small nor big, but sacred".

In his welcome address, Mr. Sita Saran Sharma, Chairman, Executive Committee of the Hindi Prachar Sabha, sald annually about five lakh students appeared for the examinations conducted by the Sabha. In the four southern states, more than 12,000 teachers were engaged in the propagation of Hindl in the villages.

At the function, honorary doctorates were conferred on seven National leaders hailing from the South. Those who were honoured were Mr. S. Nijalingappa, Dr. B. Gopal Reddy, Mr. K. P. Madhavan Nair, Mr, C. Subramanian, Mr. Nittor Srinivasa Rao, Mr. V. R. Krishnan and Dr. M. Channa Reddy.

Fifteen senior 'pracharaks', four research scholars and 28 'outstanding students' were presented with gold medals. Eleven gold medals were bagged by the post graduate department. While 235 candidates recelved PG diplomas in translation, 3200 students received BEd degrees. There were 44 MA students, 33 M . Phil students and six PhD students. Nine candidates got MCA degrees.

Mr. R. F. Neeralakattal, Registrar and General Secretary of the Sabha, Mr. S. Veeraraghavan. treasurer; Mr. M. R. Ramamurthy, secretary for examinations and Choudhari G. S. Dharasingh. second vice president, spoke on the occasion.
Dr. M. Lokanathan, convenor, proposed a vote of thanks.

# ISO/IEC JTC 1/SC 2/WG 2 PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646 

Please fill all the sections A, B and C below.
Please read Principles and Procedures Document ( $\mathrm{P} \& \mathrm{P}$ ) from
http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.
Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html. See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps. Form number: N4502-F ( Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

## A. Administrative

| 1.Title: |
| :--- |
| 2. Requester's name: |
| 3. Requester type (Member body/Liaison/Individual contribution): |
| 4. Submission date: |
| 5. Requester's reference (if applicable): |
| 6. Choose one of the following: |
| This is a complete proposal: |
| (or) More information will be provided later: |

## B. Technical - General

1. Choose one of the following:
a. This proposal is for a new script (set of characters):


Proposed name of script: .----------BHARATHI! = bharathiramchand! = bharathi1994!
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:

71
3. Proposed category (select one from below - see section 2.2 of $\mathrm{P} \& \mathrm{P}$ document):

| A-Contemporary | - | B.1-Specialized (small collection) | $X$ | B.2-Specialized (large collection) |
| :--- | :--- | :--- | :--- | :--- |
| C-Major extinct | $-\quad-\quad$ | 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?
a. If YES, are the names in accordance with the "character naming guidelines"
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?

1. bharathibyramchand.wordpress.com 2. ramchandtk@gmail.com
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

No license required. It is free for all. It is created by TK Ramchand himself. Font attached.
6. References:
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? No
b. Are published examples of use (such as samples from newspapers, magazines, or other sources)
of proposed characters attached?
No
7. Special encoding issue

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)?

Its many rules are different from the usual language scripts. Details provided.
8. 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 UAX\#44: http://www.unicode.org/reports/tr44/ and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

## C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?

If YES explain
2. Has contact been made to members of the user community (for example: National Body,
user groups of the script or characters, other experts, etc.)?

No
If YES, available relevant documents:
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?
Reference: Reference: It is used by the younger generation. Its use is gradually increasing.
5. Are the proposed characters in current use by the user community?

Yes If YES, where? Reference:
6. After giving due considerations to the principles in the $\mathrm{P} \& \mathrm{P}$ document must the proposed characters be entirely in the BMP?

## N/A

If YES, is a rationale provided?
If Yes, reference: $\qquad$
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?
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?

If YES, is a rationale for its inclusion provided?
If Yes, reference: $\qquad$
10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to, or could be confused with, an existing character?

No
If YES, is a rationale for its inclusion provided?
If Yes, reference: $\qquad$
11. Does the proposal include use of combining characters and/or use of composite sequences? If YES, is a rationale for such use provided?

Yes
Yes

If Yes, reference: $\qquad$ Combining signs, doubling signs, new vowels and consonants forming signs Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

If Yes, reference: $\qquad$ Explained with examples
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)
There are many
Soundless sign of BODY of vowels, TAILS for forming vowels, Tails turning into diacritics, Selected tails turning into digits, Formation of new vowels, Formation of new consonants, Combining, Doubling etc. fully explained.
13. Does the proposal contain any Ideographic compatibility characters?

If YES, are the equivalent corresponding unified ideographic characters identified?
If Yes, reference: $\qquad$ It is a new concept. Details given in proposal. It is called BODY of vowels.

