The Original Pronunciation of Sanskrit

Devanāgarī – Transliteration – IPA-Symbols

अ	a	ɐ ə	आ	ā	aː	इ	i	i	ई	ī	iː			
उ	u	u	ऊ	ū	uː	ऋ	ṛ	ɾ̩ ɹ̩	ॠ	ṝ	ɾ̩ː ɹ̩ː	ऌ	ḷ	l̩
ए	e	eː	ऐ	ai	a͡ɪ	ओ	o	oː	औ	au	a͡ʊ			
क्	k	k	ख्	kh	kʰ	ग्	g	g	घ्	gh	gʱ	ङ्	ṅ	ŋ
च्	c	t͡ɕ	छ्	ch	t͡ɕʰ	ज्	j	d͡ʑ	झ्	jh	d͡ʑʱ	ञ्	ñ	ɲ
ट्	ṭ	ʈ	ठ्	ṭh	ʈʰ	ड्	ḍ	ɖ	ढ्	ḍh	ɖʱ	ण्	ṇ	ɳ
त्	t	t	थ्	th	tʰ	द्	d	d	ध्	dh	dʱ	न्	n	n
प्	p	p	फ्	ph	pʰ	ब्	b	b	भ्	bh	bʱ	म्	m	m
य्	y	j	र्	r	ɾ ɹ	ल्	l	l	व्	v	v ʋ			
श्	ś	ɕ	ष्	ṣ	ʂ	स्	s	s						
ह्	h	ɦ												
ः	ḥ	x												
ं	ṃ	various												

Drafted by Maciej Zieba and Ulrich Stiehl under the auspices of Manfred Mayrhofer. Improvements by Jost Gippert, Madhav Deshpande, Sunder Hattangadi, John Smith and others. This chart is a compromise, since the **original** pronunciation of Sanskrit is not exactly known in every detail. – 06/09/2002/us.

Notes:

1. अ seems to have been pronounced originally as [ɐ] or as [ə], possibly never as [a]. Not even the pronunciation of this most often used letter अ is exactly known!
2. The original pronunciation of ऌ is not known. It occurs only in the verb क्लृप् (klṛp).
3. र् seems to have been pronounced as [ɾ] or as [ɹ], and likewise the liquid ऋ seems to have been pronounced as syllabic [ɾ̩] (notation: [ɾ] + [̩]) or as syllabic [ɹ̩].
4. The pronunciation of the semi-vowel व seems to have been either [v] or [ʋ].
5. **Visarga** (ः): **a)** Visarga seems to have been pronounced originally always as [x]. **b)** Nowadays however it is usually pronounced as [ɦ], followed by a repetition of the preceding – shortened – vowel, e.g. देवः [deːvɐɦɐ], देवैः [deːva͡ɪɦɪ], etc.
6. **Anusvāra** (ं): **a)** At the end of words before words initialled with any consonant, it is a shortcut for म् pronounced as [m]. **b)** Before all the plosives (k, c, ṭ, t, p, etc.) it is a shortcut for the respective class nasal, e.g. संधिः (saṃdhiḥ) = सन्धिः (sandhiḥ) = [sɐndʰix]. **c)** Before sibilants (श्, ष्, स्), semi-vowels (य्, र्, ल्, व्) and ह्, it seems to have nasalized its preceding vowel, e.g. संवत् (saṃvat) as [sɐ̃vɐt]. Controversial!

It should be stressed that **nowadays** pronunciation of Sanskrit differs considerably from the **original** pronunciation, being heavily influenced by the mother tongue of the speaker (Hindi, Marathi etc.). Example: तज्ज्ञानम् (taj jñānam = that knowledge), which seems to have been pronounced originally as [tɐd͡ʑ d͡ʑɲaːnɐm], is nowadays pronounced as [tɐd͡ʑ gjaːnɐm] (Hindi) or [tɐd͡ʑ dnjaːnɐm] (Marathi), irrespective of the sound assimilation caused by Sandhi rule (d + j = j + j, i.e. tad jñānam = taj jñānam).

THE INTERNATIONAL PHONETIC ALPHABET (revised to 1993, updated 1996)

CONSONANTS (PULMONIC)

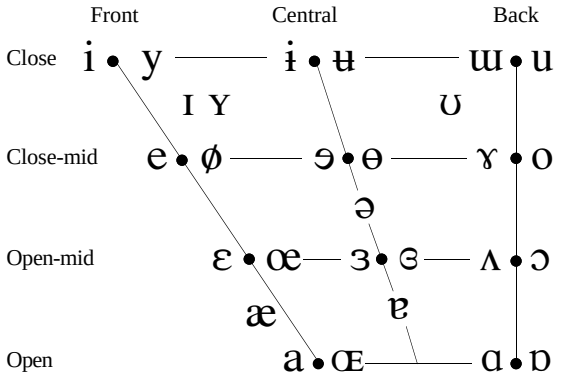
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k g	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks		Voiced implosives		Ejectives	
ʘ	Bilabial	ɓ	Bilabial	’	Examples:
|	Dental	ɗ	Dental/alveolar	pʼ	Bilabial
!	(Post)alveolar	ʄ	Palatal	tʼ	Dental/alveolar
ǂ	Palatoalveolar	ɠ	Velar	kʼ	Velar
ǁ	Alveolar lateral	ʛ	Uvular	sʼ	Alveolar fricative

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

OTHER SYMBOLS

ʍ	Voiceless labial-velar fricative	ɕ ʑ	Alveolo-palatal fricatives
w	Voiced labial-velar approximant	ɺ	Alveolar lateral flap
ɥ	Voiced labial-palatal approximant	ʧ	Simultaneous ʃ and x
ʜ	Voiceless epiglottal fricative		
ʢ	Voiced epiglottal fricative		
ʡ	Epiglottal plosive		

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary. k͡p t͡s

SUPRASEGMENTALS

ˈ	Primary stress
ˌ	Secondary stress ˌfoʊnəˈtɪʃən
ː	Long eː
ˑ	Half-long eˑ
˘	Extra-short ĕ
|	Minor (foot) group
‖	Major (intonation) group
.	Syllable break ɹi.ækt
‿	Linking (absence of a break)

TONES AND WORD ACCENTS

LEVEL		CONTOUR	
e̋ or ˥	Extra high	e᷄ or ˧˥	Rising
é ˦	High	ê ˥˩	Falling
ē ˧	Mid	e᷅ ˩˥	High rising
è ˨	Low	e᷄ ˧˩	Low rising
ȅ ˩	Extra low	e᷈ ˥˩˥	Rising-falling
↓	Downstep	↗	Global rise
↑	Upstep	↘	Global fall

DIACRITICS

Diacritics may be placed above a symbol with a descender, e.g. ŋ̊

◌̥	Voiceless	n̥ d̥	◌̤	Breathy voiced	b̤ a̤
◌̬	Voiced	s̬ t̬	◌̰	Creaky voiced	b̰ a̰
◌ʰ	Aspirated	tʰ dʰ	◌̼	Linguolabial	t̼ d̼
◌̹	More rounded	ɔ̹	◌ʷ	Labialized	tʷ dʷ
◌̜	Less rounded	ɔ̜	◌ʲ	Palatalized	tʲ dʲ
◌̟	Advanced	u̟	◌ˠ	Velarized	tˠ dˠ
◌̠	Retracted	e̠	◌ˤ	Pharyngealized	tˤ dˤ
◌̈	Centralized	ë	◌̴	Velarized or pharyngealized	ɫ
◌̽	Mid-centralized	e̽	◌̝	Raised	e̝ (ɹ̝ = voiced alveolar fricative)
◌̩	Syllabic	n̩	◌̞	Lowered	e̞ (β̞ = voiced bilabial approximant)
◌̯	Non-syllabic	e̯	◌̪	Advanced Tongue Root	e̪
◌˞	Rhoticity	ɚ a˞	◌̺	Retracted Tongue Root	e̺

◌̃	Nasalized	ẽ	
◌ⁿ	Nasal release	dⁿ	
◌ˡ	Lateral release	dˡ	
◌̚	No audible release	d̚	