

SEC-6: E-Learning Tools and Techniques for Sanskrit

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Prerequisite of the course
		Lecture	Tutorial	Practical/ Practice		
E-Learning Tools and Techniques for Sanskrit	02	1		1		Nil

Learning Objectives

This course will introduce the current research and development in Sanskrit computing. Primary emphasis will be on tools and techniques developed under government and private funding and to explore new technologies for Sanskrit. Special focus will be on e-learning and interacting tools, web application for Sanskrit, Unicode Devanagari typing tools and language computing. HTML will be taught for web application.

Learning outcomes

The course-level learning outcomes that a student of this course is required to demonstrate are indicated below:

- Learn the basic Interactive Sanskrit Teaching Learning Tools.
- Learn the Basics of Multimedia, Web based tools development.
- Working knowledge of HTML and web page development.
- Working with Unicode Typing in Devanagari Scripts.
- Learn the Various Typing Tools and Software for Devanagari Unicode.
- Learn the Text preservation techniques and web publishing.

Detailed Syllabus

Unit I

Interactive Sanskrit Teaching Learning Tools and Typing Tools:

Basics of Multimedia, Web based tools development.

Basics of HTML and web technology

Standard for Indian Languages (Unicode)

Unicode Typing in Devanagari Scripts, Various Typing Tools and Software for Devanagari Script: Baraha, Google Input Tools, Google Assistant

Unit II

Survey of Various developed Computational Tools for Sanskrit:

Sanskrit Grammar Tools

Sanskrit Text Preservation and Search

Online Indexing Tools for Sanskrit Texts

Essential/recommended readings

1. Bharti A., R. Sangal, V. Chaitanya, “NL, Complexity Theory and Logic” in Foundations of Software Technology and Theoretical Computer Science, Springer, 1990.
2. E-Content suggested by Teacher
3. Tools developed by Computational Linguistics Group, Department of Sanskrit, University of Delhi, Delhi-110007 available at: <http://sanskrit.du.ac.in>
4. Basic concept and issues of multimedia:
<http://www.newagepublishers.com/samplechapter/001697.pdf>
5. Content creation and E-learning in Indian languages: a model:
http://eprints.rclis.org/7189/1/vijayakumarjk_01.pdf
6. HTML Tutorial - W3Schools: www.w3schools.com/html
7. The Unicode Consortium: <http://unicode.org>
8. http://baraha.com/v10/help/Keyboards/kan_phonetic.htm
9. <https://www.google.co.in/inputtools/try/>

Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time