SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

B.Sc. (CA & IT) (Bachelor of Science in Computer Applications & Information Technology)
B.Sc. (CA & IT) Semester–III

Course Code	US03MACIT01	Title of the Course	**Data Structures and Algorithms**
Total Credits of the Course	**4**	Hours per Week	**4**

Course Objectives:	1. To study fundamental concepts about data structures. 2. To learn the basics of arrays, stacks, queues, trees, and linked lists. 3. To understand the concepts related to sorting and searching techniques.

Course Content		
Unit	Description	Weightage* (%)
1.	**Introduction to Data Structures** − Introduction to data structures - definition, types of data structures, applications and advantages − Primitive and non-primitive data structures and operations on them − Introduction to arrays, one and two-dimensional arrays − Representation of arrays in memory: row-major and column-major order − Address calculation of elements of one and two-dimensional arrays − Applications of arrays	25
2.	**Stack and Queues** − Introduction − Operations on the Stack- Push, Pop, Peep, Change − Applications of Stacks − Infix, Postfix, Prefix Notations − Conversion: Infix to Postfix − Types of queues : Simple queues, Circular queues, Double ended queues, Priority Queue − Applications of Queues − Operations on Simple Queues : Insert and Delete	25

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

3.	**Introduction to Trees** – Definitions of basic terms : Tree, Directed Tree, Root, Leaf, Branch, Level, Node, Forest – Applications of a tree – Binary trees : introduction, linear and linked representations – Traversals of a binary tree: Preorder, Inorder and Postorder – Types of binary trees : Full Binary Tree, Complete Binary Tree, Binary Search Tree	25
4.	**Linked Lists, Sorting and Searching techniques** – Introduction to linked lists – Types of linked lists: Singly linked lists, Doubly linked lists, Circular linked lists, Circular Doubly linked list – Operations on Singly Linked Lists: Insertion: at Front, Deletion: from Beginning – Introduction to Sorting and Searching – Sorting techniques - Bubble Sort and Merge Sort – Searching techniques - Sequential Search and Binary Search	25

Teaching-Learning Methodology	Blended learning approach incorporating both traditional classroom teaching as well as usage of ICT tools.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Examination	50%
2.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	understand the fundamental concepts of various data structures.
2.	gain knowledge on arrays, stacks, queues, trees, and linked lists.
3.	understand the basic concepts of Sorting and Searching techniques.

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Suggested References:	
Sr. No.	References
1.	Tremblay J. & Sorenson P. G., An Introduction to Data Structures with Applications, 2nd Edition, Tata McGraw-Hill Edition, 1991.
2.	Singh Bhagat & Naps Thomas, Introduction to Data Structures, Tata McGraw-Hill Publishing Co.Ltd.,1985.
3.	R. B. Patel, Expert Data Structures with C, Khanna Publications, ISBN: 81-87522-41-0, 2018.
4.	Samanta, Classis Data Structures, 2nd Edition, PHI Publication, 2009.
5.	G. S. Baluja, Data Structures through C, 4th Edition, Dhanpat Rai & Co., 2016.

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

B.Sc. (CA & IT) (Bachelor of Science in Computer Applications & Information Technology)
B.Sc. (CA & IT) Semester–III

Course Code	**US03MACIT02**	Title of the Course	**Database Management Systems - I**
Total Credits of the Course	**4**	Hours per Week	**4**

Course Objectives:	1. To study basic concepts related to DBMS, Data Models and Relational Data Model terminologies. 2. To learn basics of SQL data types, SQL statements and concepts like DML, DDL, DCL, TCL. 3. To work with tables, applying and modifying constraints, functions, joins queries.

Course Content		
Unit	Description	Weightage* (%)
1.	**Introduction to DBMS and Relational Database Design** – Basics of Database and DBMS (Data, Information, field, record, file) – Three level Architecture of Database- external, conceptual and internal – Data Models concepts: Hierarchical, Network and Relational – Relation data models concept, terminologies: tuple, attribute, domain, relation (Definition) – Relationships and Relationship types – Keys: Introduction: super key, candidate key, primary key, alternate key, foreign key – Dr. E.F. Codd Rules – Consequences of Poor database design and Functional dependencies – Difference between DBMS and RDBMS – Normal Forms: 1st Normal Form, 2nd Normal Form, 3rd Normal Form – Examples of normalization	25

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

2.	**Structured Query Language-1** – SQL - introduction , advantages and disadvantages – Data types – Types of SQL Statements : DDL DML ,DCL, TCL – Working with SQL*Plus – overview and basic commands of SQL Plus. – Tables: Creation, Removal and Alteration – Table Data: insertion, selection, updation, deletion – Filtering data using WHERE clause, ordering using ORDER BY – Pseudo Columns – ROWID, ROWNUM, USER, UID, SYSDATE – Transaction control language statements – COMMIT, ROLLBACK and SAVEPOINT	25
3.	**Structured Query Language-2** – Operators – Arithmetic, Relational, Logical, Range Searching, Pattern Matching – Null Values, Tab Table, Dual Table – Data Constraints and its types – Modifying Constraints and Use of User_Constraints – Functions – Introduction, Types of Functions (Scalar And Aggregate) – Scalar : Numeric Functions , Character Functions, Date Functions Conversion Functions – Aggregate Functions : Avg, Count, Max, Min, Sum	25
4.	**Structured Query Language-3** – Grouping using GROUP BY and HAVING – Subquery and its types – Joining tables, Types of joins – Creation and manipulation of database objects – indexes, views, sequences – Data control language statements – GRANT and REVOKE	25

Teaching-Learning Methodology	Multiple teaching-learning approaches: lectures and discussion, exploration and inquiry, cooperative group work, demonstrations, and presentations.

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Examination	50%
2.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	understand the basic concepts associated with DBMS, Data Models and Relational Data Model terminologies.
2.	understand the basics of SQL data types, SQL statements and concepts like DML, DDL, DCL, TCL.
3.	gain knowledge on tables, applying and modifying constraints, functions, joins queries.

Suggested References:	
Sr. No.	References
1.	Bipin C. Desai, An introduction to Database Systems, Galgotia Publications Pvt. Ltd., 2010.
2.	Ivan Bayross, SQL,PL/SQL The programming language of Oracle, 4th edition, BPB Publications, 2010.
3.	S. Parthsarthy and B.W.Khalkar, Understanding Database Management Systems, First edition, Master Academy, 2007.

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

B.Sc. (CA & IT) (Bachelor of Science in Computer Applications & Information Technology)
B.Sc. (CA & IT) Semester–III

Course Code	US03MACIT03	Title of the Course	**Practical based on US03MACIT01 and US03MACIT02**
Total Credits of the Course	**4**	Hours per Week	**8**

Course Objectives:	1. To understand the practical usage of data structures. 2. To understand the practical usage of Database Management Systems.

Course Content		
	Description	Weightage* (%)
	PART-A : Practical based on US03MABCA01	40%
	PART-B : Practical based on US03MABCA02	60%

Teaching-Learning Methodology	Practical-based learning in small groups and hands-on training through required ICT tools.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Evaluation	50%
2.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	apply the knowledge of data structures.
2.	apply the knowledge of Database Management Systems.

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

B.Sc. (CA & IT) (Bachelor of Science in Computer Applications & Information Technology)
B.Sc. (CA & IT) Semester–III

Course Code	**US03IDCIT04**	Title of the Course	**Client Side Scripting**
Total Credits of the Course	**2**	Hours per Week	**2**

Course Objectives:	1. To learn the basic concepts associated with scripting. 2. To understand fundamentals regarding JavaScript development.

Course Content		
Unit	Description	Weightage* (%)
1.	**Basics of JavaScript** – JavaScript basics : Syntax, Data Types, Variables, Literals, Type Casting, Operators – User interaction through dialog boxes – Built-in functions – Flow Control statements: Decision-Making and Looping – Arrays – User-defined functions,	50
2.	**Advanced JavaScript–II** – String Object (length, charAt, indexOf, substr, toLowerCase, toUpperCase), – Math Object (PI, abs, ceil, floor, max, mm, round) – Date Object (getDate, getDay, getFullYear, getMonth, getTime, getHours, getMinutes, getSeconds, setDate, setFullYear, setMonth, setTime, setHours, setMinutes, setSeconds) – Introduction to Document Object Model (DOM), DOM Hierarchy, Understanding objects & Collections m DOM, HTML Form Hierarchy – Accessing Form elements (Text, Radio, Checkbox, Dropdown, Button), Event handling	50

Teaching-Learning Methodology	Blended learning approach incorporating both traditional classroom teaching as well as usage of ICT tools.

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Examination	50%
2.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	understand the basic concepts regarding scripting.
2.	understand the role of JavaScript in Web Application Development.

Suggested References:	
Sr. No.	References
1.	Ivan Bayross, "Web Enabled Commercial Applications Development using HTML, DHTML, Javascript, Perl CGI", BPB, 2004.
2.	Douglas E Comer, The Internet, PHI, Second Edition, May 2000.
3.	Xavier C., World Wide Web Design with HTML, Tata McGraw Hill Publication, 2000.
4.	Eric Meyer, Cascading Style Sheets – The Definitive Guide, O'Reilly – SPD, First Edition, 2000.
5.	Jeremy Keith, HTML 5 for Web Designers, 2005.
6.	Manuals of suitable packages.
7.	FaitheWempen, Step by Step HTML5, PHI, 2010.
8.	Thomas A. Powell, HTML& CSS: The Complete Reference, Fifth Edition,Tata McGraw-Hill, 2010.

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

B.Sc. (CA & IT) (Bachelor of Science in Computer Applications & Information Technology)
B.Sc. (CA & IT) Semester–III

Course Code	US03IDCIT05	Title of the Course	Client Side Scripting Lab
Total Credits of the Course	2	Hours per Week	4

Course Objectives:	1. To study practical use of scripting. 2. To provide basic knowledge on practical usage of JavaScript in Web Application Development.

Course Content		
	Description	Weightage* (%)
	Practical Based on US0MICIT04	100%

Teaching-Learning Methodology	Practical-based learning in small groups and hands-on training through required ICT tools.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Examination	50%
2.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	gain practical knowledge on scripting.
2.	gain practical knowledge on JavaScript in Web Application Development.

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

B.Sc. (CA & IT) (Bachelor of Science in Computer Applications & Information Technology)
B.Sc. (CA & IT) Semester–III

Course Code	US03AECIT06	Title of the Course	**Discrete Mathematics**
Total Credits of the Course	**2**	Hours per Week	**2**

Course Objectives:	1. To study the basic concepts of vectors and matrices. 2. To understand fundamental concepts related to graph theory.

Course Content		
Unit	Description	Weightage* (%)
1.	**Vectors and Matrices** – Dot product and Norm – Matrix addition and scalar multiplication – Matrix multiplication – Transpose of matrix – Square matrices: Diagonal, upper, lower triangular, symmetric, skew symmetric, orthogonal. – Determinants up to order.	50
2.	**Graph Theory** – Definition of graph, multigraph – Degree of vertex, paths, subgraph, connected components – Cut point, bridge – Special graphs: complete, regular, bipartite. – Matrices and graphs – Planar graphs, maps and regions – Euler's formula – Colored graphs	50

Teaching-Learning Methodology	Blended learning approach incorporating both traditional classroom teaching as well as usage of ICT tools.

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Examination	50%
2.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	understand the basic concepts related to vectors and matrices.
2.	understand the fundamental concepts about graph theory.

Suggested References:	
Sr. No.	References
1.	S. Lipschutz and Marc Lars Lipson, Discrete Mathematics, Schaum's series, 2007.
2.	Kenneth H. Rosen, Discrete Mathematics and its applications, 2017.
3.	Jacob T. Schwartz , Introduction to Matrices and vectors, 2003.
4.	Vinay Kumar, Discrete Mathematics, BPB Publication, First edition, 2002.
5.	S. C. Gupta, Fundamentals of Statistics, Himalaya Publishing House, 2004.

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

B.Sc. (CA & IT) (Bachelor of Science in Computer Applications & Information Technology)
B.Sc. (CA & IT) Semester–III

Course Code	US03SECIT07	Title of the Course	**Fundamentals of E-Commerce**
Total Credits of the Course	**2**	Hours per Week	**2**

Course Objectives:	1. To study basics of E-Commerce and its classifications and models. 2. To understand basics of Electronic Marketplace and Customer Relationship Management.

Course Content		
Unit	Description	Weightage*(%)
1.	**Introduction To E-Commerce** – Definition, communication perspective, business process perspective, service perspective – Classification by nature of transaction : B2B, B2C, C2C, C2B, Non business EC, Intra-business EC – Classification of EC Applications: electronic market, inter organizational system, customer services – Benefits to organizations, consumers, and Society – Limitations of EC, framework of EC, future of EC – E-Commerce Business Models – Introduction, eight key ingredients of a business model, major B2C and B2B business models, Introduction to M-Commerce	50
2.	**Electronic Marketplaces** – Marketspace components, types of electronic markets (electronic storefronts, electronic malls, types of stores and malls) – Portals and their types, Role of intermediaries in E-markets, E-market success factors, competitive factors, Impact of E-Market on organizations (marketing, HR, manufacturing, finance and accounting) – Customer Relationship Management (CRM) – CRM : meaning, types of CRM, benefits and limitations of CRM, issues in CRM implementation, classifications of CRM applications, one-to-one marketing (personalization, collaborative filtering, customer loyalty, trust)	50

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Teaching-Learning Methodology	Blended learning approach incorporating both traditional classroom teaching as well as usage of ICT tools.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Examination	50%
2.	University Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	understand the basics of E-Commerce and its classifications and models.
2.	understand the basics of Electronic Marketplace and Customer Relationship Management.

Suggested References:	
Sr. No.	References
1.	Jason G. Miles, E-Commerce Power, Morgan James Publishing, 2021.
2.	Brett Standard, E-Commerce Business, Novelty Publishing, 2019.
3	P. T. Joseph, S. J. : E-Commerce An Indian Perspective, 3rd Edition, Prentice Hall of India (PHI), 2009.
4.	Kenneth C. Laudon, Carol Guercio Traver : E-Commerce - Business, Technology, Society, 4th Edition, Pearson, 2008.

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Add on Certificate Course

Course Code	US03IKCIT01	Title of the Course	**Dharmashastra (Aacharasamhita)**
Total Credits of the Course	2	Total Hours per week	2

Course Objectives:	The course will enable the learners to…
	• To analyse the etymology and meaning of the word "Dharma" and its significance in various cultures and religions.
	• To explore the characteristics of Dharma and how it manifests in different contexts.
	• To examine the explanations of the concept of Dharma by renowned scholars and thinkers throughout history.
	• To recognize the importance of Dharma in shaping human life, ethics, and societal values.
	• To identify the different forms of Dharma present in contemporary society and specifically in the context of Kaliyug (the current age according to Hindu cosmology).
	• To appreciate the significance of Aacharndharma (ethical conduct and righteous behavior) in upholding Dharma.
	• To analyze examples of various characteristics of Dharma in the lives of notable scholars, philosophers, and religious figures.
	• To introduce and gain an overview of the major Dharmashastras (ancient Indian texts that discuss laws, duties, and ethical principles).
	• To foster critical thinking and open discussion regarding the interpretation and application of Dharma in modern times.
	• To develop a deeper understanding of the cultural, ethical, and spiritual dimensions of Dharma and its relevance in contemporary society.

	Course Content	
Unit	**Description**	**Weightage* (%)**
1	1. Etymology and meaning of the word Dharma. 2. Characteristics of word Dharma. 3. Explanation of the word Dharma by great scholars. 4. The importance of Dharma in human life.	50%

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

2	1. Forms of Dharma at present and kaliyug.	50%
	2. Importance of Aacharndharma.	
	3. Examples of various characteristics of Dharma in the life of scholars.	
	4. Introduction to the major Dharmashastras.	

Teaching-Learning Methodology	Lecture-cum-discussion, Group Discussion, Presentations, Seminars, tutorials, Research Exercises

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination Internal Continuous Assessment in the form of Practical, Vivavoce, Quizzes, Seminars, Assignments, Attendance	30%
2.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Identify the historical and cultural context of the word "Dharma" and explain its etymology and core meaning.
2.	Analyze the characteristics of Dharma and its manifestations in various aspects of human life, including personal ethics, social responsibilities, and spiritual practices.
3.	Evaluate the explanations of Dharma provided by eminent scholars and thinkers, and critically examine different perspectives on its interpretation and application.
4.	Recognize the importance of Dharma in guiding ethical decision-making, promoting harmony in relationships and communities, and fostering a just and compassionate society.
5.	Apply the concepts of Dharma to contemporary issues and challenges, demonstrating an understanding of the different forms of Dharma in present times, the significance of Aacharndharma, and the influence of Dharma in the lives of scholars and individuals who exemplify its principles.

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Suggested References:

"Dharma: Its Early History in Law, Religion, and Narrative" by Alf Hiltebeitel
"Dharma: The Hindu, Jain, Buddhist and Sikh Traditions of India" by Veena R. Howard.
"The Concept of Dharma in Valmiki Ramayana" by Dr. Nityanand Mishra
"Dharma in Hinduism: A Historical and Philosophical Perspective" by Arvind Sharma
"Dharma and Ecology of Hindu Communities: Sustenance and Sustainability" edited by Pankaj Jain
"Understanding Dharma: The Four Authentic Sources" by Pradip Gangopadhyay

Online Resources :

Oxford Research Encyclopedia of Religion: "Dharma" -
https://oxfordre.com/religion/view/10.1093/acrefore/9780199340378.001.0001/acrefore-9780199340378-e-63
Hinduism Today: "The Four Dharmas of the Kali Yuga" -
https://www.hinduismtoday.com/modules/smartsection/item.php?itemid=5594

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Add on Certificate Course

Course Code	US03IKCIT02	Title of the Course	Mimansa (Purva and Uttara)
Total Credits of the Course	2	Total Hours per week	2

Course Objectives:	➢ Students will get an introduction to Mimamsa Shastra. ➢ Students should explain the importance of Purva Mimansa in Indian culture. ➢ Students differentiate between Purva Mimansa and Uttara Mimansa based on their characteristics. ➢ Students should present their ideas as visions of Purva Mimansa. ➢ Students discuss and give opinions about Shankaracharya's contribution to Vedanta. ➢ Students should follow Shankaracharya's main teachings in life.

Course Content		
Unit	**Description**	**Weightage* (%)**
1	➢ Introduction to Mimansa Shastra ➢ Etymology and meaning of the word Mimansa ➢ Purva Mimansa Acharya tradition and offering ➢ Rituals in Purva Mimansa and its importance in Indian culture ➢ Thought as Purva Mimansa Darshan and matters related to it	50%
2	➢ Introduction to Uttara Mimansa ➢ PrasthanTrai ➢ Main topics of Uttara Mimansa - Shankaracharya's contribution to Vedanta ➢ The main four Mahavakas of Vedanta - Six wealth and human life ➢ Major teachings of Shankaracharya	50%

Teaching-Learning Methodology	Lecture-cum-discussion, Group Discussion, Presentations, Seminars, tutorials, Research Exercises

Evaluation Pattern		
Sr.No.	Details of the Evaluation	Weightage

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

1.	Internal Written / Practical Examination Internal Continuous Assessment in the form of Practical, Vivavoce, Quizzes, Seminars, Assignments, Attendance	30%
2.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students will be able to introduce Mimansa Shastra.
2.	Students will learn about the importance of Purva Mimansa in Indian culture.
3.	Students will get to know about the main topics of Uttar Mimansa.
4.	Students can find information about Shankaracharya's contribution to Vedanta.
5.	Students will understand about wealth and human life.
6.	Students will be able to follow Shankaracharya's main teachings in life.

Suggested References:
- भारतीय दर्शन- बलदेव उपाध्याय - मीमांसासुत्र- १.१.२७.३२ - भारतीय दर्शन- डो. उमेशमिश्र - भारतीय दर्शन- श्रीकृष्ण ओझा

Online Resources : http://gu.m.wikipedia.org>wiki
http//hi.m.wikipedia.org>wiki

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Add on Certificate Course

Course Code	US03IKCIT03	Title of the Course	**Nirukta**
Total Credits of the Course	2	Total Hours per week	2

Course Objectives:	The course will enable the learners to….. ● To introduce Nirukta as Vedanga. ● To explain the relation between Nighauntu and Nirukta with its meaning. ● To introduce in detail the life and works of Yaska. ● To explain the special terms used in Nirukta. ● To explain and illustrate Patha-parampara of Nirukta.

Course Content		
Unit	**Description**	**Weightage* (%)**
1	Introduction of Vedanga literature An introduction of Nirukta as one of the Vedanga Date and work of Yask in brief. Introduction to Nighantu and Nirukta. terminology Brief introduction of chapters Nirukta under Nighantu	50%
2	Concept of Nirvanchan according to Yask Introduction of Padachatushtaya Shadbhavavikara -with illustration Objectives of learning Nirukta, Devata-vigyan, types of Richas	50%

Teaching-Learning Methodology	Lecture-cum-discussion, Group Discussion, Presentations, Seminars, tutorials, Research Exercises

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

1.	Internal Written / Practical Examination Internal Continuous Assessment in the form of Practical, Vivavoce, Quizzes, Seminars, Assignments, Attendance	30%
2.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Introduce Nirukta as Vedanga.
2.	Explain the relation between Nighauntu and Nirukta as well as with its meaning.
3.	Introduce in detail the life and works of Yaska.
4.	Explain the special terms used in Nirukta.
5.	Explain and illustrate Patha-parampara of Nirukta

Suggested References:
The Nighantu and Nirukta - Laxman Sarup
Niruktam - Umashankar Rushi
The Etymology of Yaska - Siddheshwar Varma

Online Resources :
Relevant entries in Wikipedia (https://www.wikipedia.org/) and Encyclopaedia Britannica (https://www.britannica.com/)
Relevant books available on archive.org
Relevant articles on Jstor (https://www.jstor.org/), Project Muse (https://muse.jhu.edu/)

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Add on Certificate Course On Nyaya

Course Code	US03IKCIT04	Title of the Course	**Nyaya Darshan**
Total Credits of the Course	2	Total Hours per week	2

Course Objectives:	The course will enable the learners to….. • To know Nyaya as one of the Indian Knowledge Systems. • To understand basic terms of Nyaya • To understand and explain the importance of Nyaya as the Science of logic. • To apply logical approach in validating knowledge • To understand the application of Nyaya in day to day life

Course Content		
Unit	**Description**	**Weightage* (%)**
1	The basic contribution of Akshpad Gautam. Five elements of Nyaya, Pratigna (Preposition), Purpose (Hetu), example, Upnaya, (Nigman) Conclusion	50%
2	Basic of Nyaya Vaisheshik (Kanad) Nyaya sutras and sixteen elements Preman, Prameya, Sanshayak, Prayojen, Drishtant, Avayava etc. Definition and illustrative understanding of sixteen elements	50%

Teaching-Learning Methodology	Lecture-cum-discussion, Group Discussion, Presentations, Seminars, tutorials, Research Exercises

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination Internal Continuous Assessment in the form of Practical, Vivavoce, Quizzes, Seminars, Assignments, Attendance	30%
2.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students explain Nyaya as the Science of logic.
2.	Students clearly mentions the five base elements of Nyaya.
3.	Students apply logical approach in day to day life.
4.	Students explain specific basic of terms of Nyaya.

Suggested References:
Nyaya Darshan, Chaukhamba Sanskrit Bhawan, Varanasi,
Bharatiya Darshan Acharya Baldeva **Upadhyaya**, https://archive.org/details/BharatiyaDarshanAcharyaBaldevaUpadhyaya/page/n3/mode/2up

Online Resources :
https://archive.org/

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Add on Certificate Course on Purana

Course Code	US03IKCIT05	Title of the Course	**Purana**
Total Credits of the Course	2	Total Hours per week	2

Course Objectives:	The course will enable the learners to….. • Derive importance of Puranas and their historical context. • Explore the different types and classifications of Puranas. • Examine the major themes and mythological narratives present in the Puranas. • Analyze the relationship between Puranas and Hindu philosophy. • Investigate the cultural, ethical and social significance of the Puranas in Indian society. • Encourage critical thinking and interpretation of Puranic texts.

Course Content		
Unit	**Description**	**Weightage* (%)**
1	**Introduction to Puranas and Major Themes** • Overview of ancient Indian scriptures • Historical context and development of Puranas • Classification of Puranas: Mahapuranas, Upapuranas, and others • Creation stories and cosmogony • Genealogies of gods, sages, and dynasties • Incarnations of deities (avatars) and their significance	50%
2	**Social, Cultural and Ethical Implications of the Puranas** • Moral teachings and ethical codes in Puranic literature • Role models and ideals depicted in the Puranas • Gender roles and societal norms in Puranic narratives • Influence of Puranas on art, music, and dance forms • Rituals and festivals inspired by Puranic traditions • Puranas as repositories of historical and cultural knowledge • Approaches to Interpreting Puranic Texts • Reflection on the relevance of Puranic wisdom in modern times	50%

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Teaching-Learning Methodology	Lecture-cum-discussion, Group Discussion, Presentations, Seminars, tutorials, Research Exercises

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination Internal Continuous Assessment in the form of Practical, Vivavoce, Quizzes, Seminars, Assignments, Attendance	30%
2.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Explain the Importance of Puranas
2.	Obtain wisdom from Puranas
3.	Derive social, cultural and ethical implications of Puranas

Suggested References:

Rocher, L. (1986). The Puranas. Otto Harrassowitz Verlag.

Mani, V. (2003). Puranic Encyclopedia: A Comprehensive Dictionary with Special Reference to the Epic and Puranic Literature. Motilal Banarsidass.

Dimmitt, C., & van Buitenen, J. A. B. (1978). Classical Hindu Mythology: A Reader in the Sanskrit Puranas. Temple University Press.

Wilson, H. H. (2005). The Vishnu Purana: A System of Hindu Mythology and Tradition. Cosimo Classics.

Hazra, R. C. (1994). The Rise and Growth of the Puranic Literature. Munshiram Manoharlal Publishers.

Mani, V. (1991). Puranas in Ancient Indian Tradition: The Brahmavaivarta Purana and Its Textual Material. Motilal Banarsidass.

Kramrisch, S. (1988). The Presence of Śiva. Princeton University Press.

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Dalal, R. (2014). The Vedas: An Introduction to Hinduism's Sacred Texts. Penguin UK.

Thapar, R. (2004). Early India: From the Origins to AD 1300. University of California Press.

Pargiter, F. E. (2018). Ancient Indian Historical Tradition. Routledge.

Online Resources :

- Sacred Texts: Puranas - A comprehensive collection of translated Puranic texts available online, including the Vishnu Purana, Shiva Purana, and Bhagavata Purana. Accessible at: http://www.sacred-texts.com/hin/index.htm
- Internet Archive - The Internet Archive hosts a vast collection of Puranic texts, scholarly works, and research papers. It provides free access to digitized versions of rare and valuable books on Puranas. Accessible at: https://archive.org/
- Encyclopedia Britannica: Purana - An informative article on Puranas, providing an overview of their history, structure, and themes. It also explores the cultural and religious significance of Puranas in Hinduism. Accessible at: https://www.britannica.com/topic/Purana

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Add on Certificate Course on Shiksha

Course Code	US03IKCIT06	Title of the Course	**Shiksha**
Total Credits of the Course	2	Total Hours per week	2

Course Objectives:	The course will enable the learners to….. ● To introduce and explain shiksha in vedanga literature ● To describe and explain shiksha as vedanga ● To Explain shiksha as science of pronunciation in general ● To Elaborate and explain part and parcel of science of pronunciation ● To discuss how the shiksha helpful to understand meaning of vedic mantras

Course Content		
Unit	**Description**	**Weightage* (%)**
1	Shiksha as a limb of Veda Introduction of Shiksha Granthas like Yajnavalkya and Paniniya-shiksha, Shiksha as described in Naradapurana and Concept of Anuchana (**अनुचान**), Science of Pronunciation, Archika, Gothic and Samik, Vowels under Samagana	50%
2	Importance of Shiksha Granthas, Shiksha and Pratishakhya, Importance of Paniniya-shiksha in Shikshagranthas, Places of pronunciation, Discipline of reciting vedamantras described in Paniniyashiksha	50%

Teaching-Learning Methodology	Lecture-cum-discussion, Group Discussion, Presentations, Seminars, tutorials, Research Exercises

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination Internal Continuous Assessment in the form of Practical, Vivavoce, Quizzes, Seminars, Assignments, Attendance	30%
2.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Introduce and explain vedanga literature
2.	Develop the skill of describe and explain shiksha as vedanga
3.	Demonstrate shiksha as science of pronunciation in general
4.	Execute the knowledge discussed about science of pronunciation in paniniyashiksha
5.	Apply how the shiksha helpful to understand meaning of vedic mantras

Suggested References:
Vedic Sahitya Aur Sanskriti, Upadhyay Baldev, Pub.Sharda Mandir, Kashi

Online Resources :
Relevant entries in Wikipedia (https://www.wikipedia.org/) and Encyclopaedia Britannica (https://www.britannica.com/)
Relevant books available on archive.org
Relevant articles on Jstor (https://www.jstor.org/), Project Muse (https://muse.jhu.edu/)

*****

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

Add on Certificate Course on व्याकरणम्

Course Code	US03IKCIT07	Title of the Course	व्याकरणम्
Total Credits of the Course	2	Total Hours per week	2

Course Objectives:	- વિદ્યાર્થીઓ શબ્દરૂપોના પ્રકારો ઉદાહરણ દ્વારા સમજાવે.
	- વિદ્યાર્થીઓ સ્વર સંધિ અને વ્યંજન સંધિ વચ્ચેનો ભેદ સ્પષ્ટ કરે.
	- વિદ્યાર્થીઓ વિવિધ ઉદાહરણ દ્વારા સમાસના પ્રકાર ઓળખાવે.
	- વિદ્યાર્થીઓ વિભક્તિના આધારે વાક્યોની રચના કરે.
	- વિદ્યાર્થીઓ વાક્યોમાંથી કર્તૃ, કર્મ અને ભાવવાચક શબ્દો અલગ તારવે.
	- વિદ્યાર્થીઓ અવ્યવ અને ઉપસર્ગના વાક્યો વચ્ચેનો તફાવત આપે.
	- વિદ્યાર્થીઓ અવ્યવ અને ઉપસર્ગના વિગતે ચર્ચા દ્વારા રૂપો બનાવે.

Course Content		
Unit	**Description**	**Weightage* (%)**
1	१. संस्कृतवर्णमालापरिचयः (चतुर्दशमाहेश्वरसूत्राणि)। २. शब्दरूपम् - a शब्दरूपम् - संज्ञाशब्दाः। (व्यावहारिकाः) b शब्दारुपाणि - स्वरान्तम् / व्यञ्जनान्तम्) c सर्वनामशब्दाः - अस्मद्, युष्मद्, तद्, एतद्, यद्, भवत्, किम्, इदम्, अदस्, सर्व (त्रिषु लिङ्गेषु) अ -इ-उ-ऋ कारान्ताः पुलिंङ्ग- स्त्रिलिंङ्ग-नपुषकलिंङ्ग शब्दाः। व्याकरणम् १. धातुरूपम् (क्रियारूपम्) (लट्-लङ् - लृट्) (चयनिता: धातवः) २. सन्धिः स्वरसन्धिः- यण् - अयादि- गुण- वृद्धि- दीर्घ- पूर्वरूप- पररूप- प्रकृतिभाव। व्यञ्जनसन्धिः- परसवर्णः- अनुनासिक- श्चुत्व-ष्टुत्व- जश्त्व- चर्त्व-णत्व षत्वविधिः।	50%

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

	विसर्गसन्धि:- लोप-विकारादिविधि: (विसर्गस्य-र्, स्. श्, ष्) अनुस्वार-लोप-लत्वादि विधि:।	
2	१. समास: - केवल- अव्ययीभाव- तत्पुरुष:- कर्मधारय:- द्विगु- बहुवीहि- द्वन्द्व: समासम्। २. विभक्ति: कर्तृ- कर्म- करण- सम्प्रदान- अपादान-सम्बन्ध- अधिकरण- सम्बोधन- विभक्ति:। ३. वाच्यम्- कर्तृ, कर्म, भाववाच्यम् । व्याकरणम् १. प्रत्यया:। २. अव्ययम्। ३. उपसर्गा:। ४. सङ्ख्या- सङ्ख्यावाचि- शब्दरूपाणिएक:, द्वौ, त्रय:, चत्वार: (त्रिषु लिङ्गेषु) संख्या ५-१००।	50%

Teaching-Learning Methodology	Lecture-cum-discussion, Group Discussion, Presentations, Seminars, tutorials, Research Exercises

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination Internal Continuous Assessment in the form of Practical, Vivavoce, Quizzes, Seminars, Assignments, Attendance	30%
2.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	વિદ્યાર્થીઓ શબ્દરૂપોના પ્રકારો ઉદાહરણ દ્વારા સમજશે.
2.	વિદ્યાર્થીઓ સ્વર સંધિ અને વ્યંજન સંધિ વચ્ચેનો ભેદ સ્પષ્ટ કરી શકશે.

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)
Syllabus with effect from the Academic Year 2024-2025

3.	વિદ્યાર્થીઓ વિવિધ ઉદાહરણ દ્વારા સમાસના પ્રકાર ઓળખશે.
4.	વિદ્યાર્થીઓ વિભક્તિના આધારે વાક્યોની રચના કરશે.
5.	વિદ્યાર્થીઓ વાક્યોમાંથી કર્તૃ, કર્મ અને ભાવવાચક શબ્દો અલગ તારવશે.
6.	વિદ્યાર્થીઓ અવ્યવ અને ઉપસર્ગના વાક્યો વચ્ચેનો તફાવત જાણશે.
7.	વિદ્યાર્થીઓ અવ્યવ અને ઉપસર્ગના વિગતે ચર્ચા દ્વારા રૂપો બનાવશે.

Suggested References:

1. Keshav Bhikhaji Dhawale, An Easy Grammar of Sanskrit, S.B. Datar, Pub, Maharashtra, 2015
2. Ratnakar Narale, Sanskrit for English Speaking People, Prabhat Prakashan, New Delhi, 2013
3. रचनानुवादकौमुदी, कपिलदेवद्विवेदी, विश्वविद्यालयप्रकाशन, विशालाक्षीभवन, भूगर्भतलचौक, वाराणसी
4. अनुवादचन्द्रिका, ब्रह्मानन्दत्रिपाठी, चौखम्बासुरभारतीप्रकाशनचौक, वाराणसी 221001
5 संस्कृतस्वयंशिक्षक, श्रीपाद्दामोदरसातवलेकर, राजपालएण्डसन्स, कश्मीरीगेट, नईदिल्ली 110006
6 व्याकरणसौरभम्, सम्पादक कमलाकान्तमिश्र, एन. सी. ई. आर. टी., नईदिल्ली 110006

Online Resources :

https://www.motivationalstoriesinhindi.in/2020/01/book-sanskrit-pdf.html

*****