GUJARAT TECHNOLOGICAL UNIVERSITY
Program Name: Bachelor of Computer Applications
Level: Under Graduate
Course / Subject Code: BC01001081
Course / Subject Name: Indian Knowledge System

w. e. f. Academic Year:	June-2024
Semester:	1
Category of the Course:	Indian Knowledge System (IKS)

Prerequisite:	Motivation to learn and explore great Indian heritage
Rationale:	INDIAN civilization has permanently attached great value to knowledge. In Bhagavad Gita, Shree Krishna says – "**न हि ज्ञानेन सदृशं पवित्रमिह विद्यते।**" - Indeed, there is nothing purifying here comparable to Knowledge.

The Indian Knowledge System talks about two types of knowledge (**विध्या**), one **अपराविध्या** (worldly knowledge) and **पराविध्या**/**ब्रह्मविध्या** (knowledge which liberate). However, it is a common perception that the body of knowledge represented in our Indian Scriptures only relates to some ritual practices. On the contrary, there is an amazingly large body of intellectual texts, the world's largest collection of manuscripts, and its attested tradition of texts, thinkers, and schools in so many domains of knowledge.

It is an exciting and fascinating aspect of knowledge in India that it prevails in diverse ways and is expressed at varied levels. In many areas such as Medicine, Mathematics, Science and Technology, Psychology, Philosophy, Agriculture, Grammar, Language, Dance, Music, and Astrology, to name just a few, there is wide and extensive knowledge both at the level of the classical texts and the folk traditions. They are often referred to as "Shastra" and "Lok Parampara" respectively.

This course aims to introduce this great tradition of knowledge to BCA students. This module will introduce scientific and technological aspects of the great Indian Knowledge System. |

Course Outcome:
After completion of the course, the student will able to:

No	Course Outcomes	RBT Level
01	Explain about various texts and traditions of the Indian Knowledge System.	U
02	Explain the scientific aspects of Sanskrit and its Grammar.	U
03	Explain Indian contribution to mathematics, science, technology, philosophy, health, and psychology.	U

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+ (PR/2)	Assessment Pattern and Marks				Total Marks
				Theory		Practical		
L	**T**	**PR**	**C**	**ESE (E)**	**PA / CA (M)**	**PA/CA (I)**	**ESE (V)**	
2	0	0	2	70	30	-	-	100

Course Content:

Unit No.	Content	No. of Hours	% of Weightage
1.	Introduction to IKS	2	5
2.	The Vedic Corpus	2	5
3.	Indian Philosophical System	3	10
4.	Scientific Foundation in Linguistics	3	10
5.	Indian Number System and Units of Measurement	3	10
6.	Knowledge: Framework and Classification	3	10
7	Indian Mathematics: Vedic Mathematics and other ancient mathematical work	8	40
8	Astronomy	2	5
9	Health, Wellness, and Psychology	2	5
	Total	28	100

Suggested Specification Table with Marks (Theory):

Distribution of Theory Marks					
R Level	**U Level**	**A Level**	**N Level**	**E Level**	**C Level**
50	50	-	-	-	-

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom's Taxonomy)

References/Suggested Learning Resources:
(a) Books:
1. Introduction to Indian Knowledge System: Concepts and Applications by B. Mahadevan, Vinayak Rajat Bhat, and Nagendra Pavana R.N.; Publisher: Prentice Hall India
2. Set of five books published by School of IKS (**धरोहर**),

CO- PO Mapping:

Semester 1	Indian Knowledge System										
	POs										
Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	-	-	-	-	-	-	2	-	-	-	1
CO2	2	-	-	-	-	-	2	-	3	-	1
CO3	-	-	-	-	-	-	2	-	-	3	1

GTU *Legend: '**3**' for high, '**2**' for medium, '**1**' for low and '**-**' for no correlation of each CO with PO.*

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