SANKALCHAND PATEL UNIVERSITY ।। अथातो ज्ञानजिज्ञासा ।।	**FACULTY OF COMPUTER SCIENCE** **Master of Computer Application (Sem-II)** In Effect from Academic Year 2023-2024

Branch Name:	MCA
Program Code:	CS201
Course Name:	INFORMATION RETRIEVAL - PRACTICAL
Course Code:	3CS2010209P
Pre-Requisite Course:	Basic knowledge of web designing, Data Structure.

Course Objectives:

The objectives of the course are to:

1. Understand concepts of Information Retrieval.
2. Understandfunctionsofaninformationretrievalsystemandanalysethecomponentsof an information retrieval system.
3. Understand concept of textual document indexing, indexing and searching, Human Computer Interaction, text analytics and retrieval evaluations.
4. Understand the concept of Web Retrieval and Digital Libraries.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				**Evaluation Scheme (Marks)**				
				Theory (Marks)		**Practical (Marks)**		
Lecture (L)	**Tutorial (T)**	**Practical (P)**	**Credit**	**University Assessment**	**Continuous Assessment**	**University Assessment**	**Continuous Assessment**	**Total (Marks)**
-	-	3	3	-	-	25	25	50

LAB/ Practical:

Note: The practical list provided be ne at his for reference only. The course teacher may Change/formulate it as per his/her methodology and requirement.

Sr.No	**Practical Experiments**
1.	A Search Engine for all pages of your college domain, crawl index and search all pages in your college domain.
2.	Link Mining in your college Domain, Analyze the hyperlink structure of the College domain.
3.	Met search Engine, Build a search engine which combines the results of 4 other popular search engines.
4.	Hypertext Clustering, Cluster hyper text documents.
5.	Implementation of various classification algorithms texts.

Text Books:

1. Ricardo Baeza-Yates, Berthier Ribeiro-Neto “Modern Information Retrieval”, PearsonIndiaEducation,Inc.,2007.CopyrightbytheACMPress.513pp.,ISBN: 978-81-317-0977-1

Reference Books:

1. C.Manning,P.Raghavan,andH.Schütze,"IntroductiontoInformationRetrieval", CambridgeUniversityPress,2008
2. Pang-Ning Tan,MichaelSteinbachandVipinKumar,"IntroductiontoDataMining", Addison-Wesley, 200s6
3. RobertR.Korfhage,"InformationStorageandRetrieval",JohnWiley&Sons,1997, 349 pp.,ISBN: 0-471-14338-3

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Learn fundamental concepts of Information Retrieval (IR), basic algorithms and techniques for information retrieval (document index in gland retrieval, query processing).	1 Remembering 2 Understanding
CLO2	Learn various types of query languages, text operations and apply quantitative evaluation methods for the IR systems	1 Remembering 2 Understanding
CLO3	Explain different retrieval models and basic algorithms involved in processing and retrieval of information.	2 Understanding 3 Applying
CLO4	Evaluate existing information retrieval systems and suggest how the systems can be proved.	1 Remembering 3 Applying 2 Understanding
CLO5	Understand the Index Compression.	5 Evaluate 3Applying 4 Analyze
CLO6	Understand the Term Vocabulary And Postings Lists.	6 Creating 3 Applying

Mapping of CLOs with Pos & PSOs

Course Learning Outcomes	**Program Outcomes (POs)**												**Program Specific Outcomes(PSOs)**	
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**
CLO1	**H**	**M**	**L**		**M**		**H**				**L**		**H**	**M**

CLO2		**L**		**M**		**L**		**M**		**M**				**H**
CLO3	**M**	**H**			**M**	**M**		**M**	**M**			**M**	**M**	**M**
CLO4	**H**	**M**		**M**			**M**		**H**		**M**	**L**	**H**	
CLO5	**M**	**M**		**H**		**M**		**H**		**M**			**M**	
CLO6		**M**			**M**		**H**		**M**		**L**		**M**	

H: High, M:Medium, L:Low