



SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.25)
Syllabus with effect from the Academic Year 2021-2022

Masters of Library & Information Science (Library and Information Science)
MLISc. Semester II

Course Code	PA02CLIB51	Title of the Course	Information Storage & Retrieval
Total Credits of the Course	5	Hours per Week	5
Course Objectives:	<ol style="list-style-type: none">1. To understand the concept of indexing.2. To get acquainted with different types of vocabulary control devices.3. To get an insight into the provisions in a thesaurus and methodology of its constructions with reference application of computers.4. To recognize different tools and techniques associated with the artificial intelligences based subject indexing systems.5. To explore the strengths and weaknesses of different indexing techniques		

Course Content		
Unit	Description	Weightage* (%)
I	Cataloguing & Subject Indexing: Principles of Subject Cataloguing: Assigning Subject Heading Using Library of Congress Subject Heading & Sears List of Subject Heading Etc. Pre- & Post Co-Ordinate Indexing & Citation Indexing	25%
II	Indexing Languages & Vocabulary Control: Indexing Languages: Types & Characteristics Vocabulary Control: Tools of Vocabulary Control Structure & Construction of an IR Thesaurus, Design and Development of IR Thesaurus Trends In Indexing Assigned Indexing Practice Derived Indexing Practice Formulation of Search Strategy Search Engines Federated Search Aggregators Subject Gateways New Trends: Semantic Web, OWL (Ontology Web Language)	25%
III	Information Retrieval: IR Models, Basic Models, Models Based On Theory, Tools And Recent Models; Search Strategies: Evaluation of Information Retrieval Systems; Trends In IR Models New Trends: Data Storage and Data Management – Features and contribution of AI (ML + DL), IoT in Intelligent Data Management.	25%
IV	Abstract & Abstracting: Concept, Purpose & Its Usefulness: Characteristics of Good Abstract Types Abstracting Procedure Standards & Guidelines For Preparing Abstract Automatic Abstracting	25%



Teaching-Learning Methodology	Classroom Teaching Seminar, Assignment Project work Practical
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Acquire knowledge on concepts and terminologies in Information Processing and Retrieval Theory.
2.	Understand and apply various Indexing systems and Bibliographic Description Standards
3.	Apply search strategies to locate and retrieve required information.
4.	Differentiate the past, present and current practice of Information and Data Storage and Retrieval tools and techniques.
5.	Understand the marketable value of information products and services.
6.	Applies the principles, approaches and methods of marketing in the Library Environment.

References
<ol style="list-style-type: none"> 1. Foskett (AC). The Subject Approach to Information. 4th Ed. London: Bingley, 1982. 2. Chowdhary (GG). Introduction to Modern Information Retrieval. 2nd Ed. London: Facet Publishing, 2003. Gopinath (MA). Construction of Depth Version of Classification: A Manual. New Delhi. Wiley Eastern Limited, 1986. 3. Gorman (GE) Ed. Meta Data Application for Management, London, Facet Publishing, 2003.



4. Harter (Stephen P.). *Online Information Retrieval: Concept, Principles and Techniques*, Orlando, Academic Press, 1978.
5. Hepas (ITS). *Information Retrieval: Computational and Theoretical Aspects*. New York, Academic Press. 1978.
6. Houghton (Bernard) and Convey (John). *Online Information Retrieval Systems: An Introductory Manual to Principles and Practices*. 2nd Ed. London Clive Bingley, 1984.
7. Houghton (Bernad) Ed. *Computer Based Information Retrieval Systems*. London, Clive Bingley, 1968.
8. Atchison (Jean) and Gilchrist (Alan). *Thesaurus Construction: A Practical Manual*. London: Aslib. 1972.
9. Lancaster (F Wilfrid). *Information Retrieval Systems: Characteristics, Testing and Evaluation*. 2nd Ed. New York: Wiley, 1979.
10. Ranganathan (S R). *Prolegomena to Library Classification V1*, Bangalore, Sarda Ranganathan Endowment for Library Science, 1967. Page 14 of 21
11. Ravichandra Rao (I K). *Library Automation DRTC, Refresher Seminar (14) 1983*.
12. Rowley (Jennifer E). *Abstracting and Indexing*. Aldorshot: Gower, 1997.
13. Salton (G) *Automatic Information Organisation and Retrieval*, 1968.
14. Seetaram (S). *Information Consolidation and Repackaging*. Y. K. Publishers.
15. Simmons (P) and Hopkins (A). *CCF: The Common Communication Format*. Paris: UNESCO, 1984.
16. Stokes (Adrian). *Concise Encyclopaedia of Information Technology*. 3rd Ed. Hants Wild Weed, 1986.
17. UNESCO. *CCF*. Paris: UNESCO. 1988.
18. Vickery (B C). *Techniques of Information Retrieval*. London: Butterworths, 1970.
19. Vickery (B C). *Information Systems; 1973*.

On-line resources to be used if available as reference material

On-line Resources

Korfhage, R.R., 1997. *Information storage and retrieval*. John Wiley & Sons, Inc.

Link: <https://dl.acm.org/doi/abs/10.5555/260869>

Martin, C.W., Reid, F.S., Forbus, G.L., Adams, S.M., Shannon, C.P. and Pirpich, E.A., E Systems Inc, 1996. *Mass data storage and retrieval system*. U.S. Patent 5,504,873.

Link: <https://patentimages.storage.googleapis.com/5a/0f/32/3a1cc33cb611db/US5504873.pdf>

