**IT9158 INFORMATION RETRIEVAL TECHNIQUES**

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**UNIT I INTRODUCTION 9**

Basic Concepts – Retrieval Process – Modeling – Classic Information Retrieval – Set Theoretic, Algebraic and Probabilistic Models – Structured Text Retrieval Models – Retrieval Evaluation –Word Sense Disambiguation

**UNIT II QUERYING 9**

Languages – Key Word based Querying – Pattern Matching – Structural Queries – Query Operations – User Relevance Feedback – Local and Global Analysis – Text and Multimedia languages

**UNIT III TEXT OPERATIONS AND USER INTERFACE 9**

Document Preprocessing – Clustering – Text Compression - Indexing and Searching – Inverted files – Boolean Queries – Sequential searching – Pattern matching – User Interface and Visualization – Human Computer Interaction – Access Process – Starting Points –Query Specification - Context – User relevance Judgment – Interface for Search

**UNIT IV MULTIMEDIA INFORMATION RETRIEVAL 9**

Data Models – Query Languages – Spatial Access Models – Generic Approach – One Dimensional Time Series – Two Dimensional Color Images – Feature Extraction

**UNIT V APPLICATIONS 9**

Searching the Web – Challenges – Characterizing the Web – Search Engines – Browsing – Meta-searchers – Online IR systems – Online Public Access Catalogs – Digital Libraries – Architectural Issues – Document Models, Representations and Access – Prototypes and Standards

**TOTAL = 45**

**REFERENCES**


1. Ricardo Baeza-Yate, Berthier Ribeiro-Neto, “Modern Information Retrieval”, Pearson Education Asia, 2005.
2. G.G. Chowdhury, “Introduction to Modern Information Retrieval”, Neal-Schuman Publishers; 2nd edition, 2003.
3. Daniel Jurafsky and James H. Martin, “Speech and Language Processing”, Pearson Education, 2000
4. David A. Grossman, Ophir Frieder, “ Information Retrieval: Algorithms, and Heuristics”, Academic Press, 2000
5. Charles T. Meadow, Bert R. Boyce, Donald H. Kraft, “Text Information Retrieval Systems”, Academic Press, 2000