INFORMATION RETRIEVAL

Subject Code: 10IS842   **I.A. Marks: 25**
Hours/Week: 4   **Exam Marks: 100**
Total Hours: 52   **Exam Hours: 3**

PART – A

UNIT – 1   **7 Hours**
Introduction, Retrieval Strategies – 1: Introduction; Retrieval Strategies: Vector Space Model; Probabilistic Retrieval strategies

UNIT – 2   **6 Hours**
Retrieval Strategies – 2: Some More Retrieval Strategies: Language Models; Inference Networks; Extended Boolean Retrieval; Latent Semantic Indexing; Neural Networks; Genetic Algorithms; Fuzzy Set Retrieval.

UNIT – 3   **7 Hours**
Retrieval Utilities: Relevance feedback; Clustering; Passage-Based Retrieval; N-Grams; Regression Analysis; Thesauri; Semantic Networks; Parsing.

UNIT – 4   **6 Hours**
Indexing and Searching: Introduction; Inverted Files; Other indices for text; Boolean queries; Sequential searching; Pattern matching; Structural queries; Compression.

PART – B

UNIT – 5   **6 Hours**
Cross-Language Information Retrieval and Efficiency: Introduction; Crossing the language barrier; Cross-Language retrieval strategies; Cross language utilities. Duplicate Document Detection.

UNIT – 6   **6 Hours**
Integrating Structured Data and Text: Review of the relational model; A historical progression; Information retrieval as a relational application; Semi-structured search using a relational schema; Multi-dimensional data model.

UNIT – 7   **7 Hours**
Parallel Information Retrieval, Distributed Information Retrieval: Parallel text scanning; Parallel indexing; Clustering and classification; Large

parallel systems; A theoretic model of distributed information retrieval; Web search; Result fusion; Peer-to-Peer information systems; Other architectures.

UNIT – 8   7 Hours
Multimedia IR: Introduction; data modeling; Query languages; Spatial access methods; A general multimedia indexing approach; One-dimensional time series; Two-dimensional color images; Automatic picture extraction.

Text Books:
1. David A. Grossman, Ophir Frieder: Information Retrieval Algorithms and Heuristics, 2nd Edition, Springer, 2004.
   (Chapters 1, 2, 3, 4, 5, 6, 7, 8)
2. Ricardo Baeza-Yates, Berthier Ribeiro-Neto: Modern Information Retrieval, Pearson Education, 1999
   (Chapters 8, 11, 12)

Reference Books:
1. William B. Frakes, Ricardo Baeza-Yates (Editors): Information Retrieval Data Structures & Algorithms, Pearson Education, 1992.

SUPPLY CHAIN MANAGEMENT

Subject Code: 10IS843	**I.A. Marks: 25**
Hours/Week: 4	**Exam Marks: 100**
Total Hours: 52	**Exam Hours: 3**

PART – A

UNIT – 1   6 Hours
Introduction to Supply Chain, Performance of Supply Chain: What is a Supply Chain; Decision phases in a supply Chain; Process view of a Supply Chain; The importance of Supply Chain Flows; Examples of Supply Chains. Competitive and Supply Chain strategies; Achieving strategic fit; Expanding strategic scope.

UNIT – 2   6 Hours
Supply Cain drivers and Obstacles, Designing Distribution Network: Drivers of Supply Chain Performance; A framework for structuring drivers; Facilities, Inventory, Transportation, and Information; Obstacles to achieve strategic fit
The role of distribution in the Supply Chain; factors influencing distribution network design; Design options for a distribution network; the value of distributors in the Supply Chain; Distribution Networks in practice.