

Duration : 3 Hours

Marks : 80 Marks

N.B. : (1) Question No 1 is Compulsory.

(2) Attempt any three questions out of the remaining five.

(3) All questions carry equal marks.

(4) Assume suitable data, if required and state it clearly.

- Q.1 Solve any four.
- a. Compare and contrast Boolean Model vs Vector Space Model. **5**
  - b. Specify the significance of User Relevance feedback in an IR system. **5**
  - c. Explain inverted file indexing with suitable examples. **5**
  - d. Explain the process of Structured Text retrieval model. **5**
  - e. Illustrate different types of keyword-based queries. **5**
- Q.2
- a. Draw the taxonomy of IR models and explain any one IR modeling technique. **10**
  - b. What is the significance of **tf** and **idf** ? How can you calculate **tf** and **idf** in a vector model? **10**
- Q.3
- a. Explain the various system related issues faced in Information retrieval systems and how they can be refined for a deployed system. **10**
  - b. State the different types of queries. Explain the pattern matching query concept with an example . **10**
- Q.4
- a. What is the role of suffix array and suffix tree in information retrieval system with example. **10**
  - b. What is Latent Semantic Indexing model ? Write the advantages of Latent Semantic Indexing Model? **10**
- Q.5
- a. Define Multimedia information retrieval. Discuss indexing and searching. **10**
  - b. What is the difference between Unranked Retrieval models and Ranked Retrieval models. **10**
- Q.6 Write short notes on any two. **20**
- a. Information Retrieval in digital libraries.
  - b. Sequential Searching.
  - c. Flat browsing vs Hypertext Browsing model.
  - d. Distributed Information Retrieval.
-