

**Duration: - 3 Hours**

**Marks: 80 Marks**

NB: - Question 1 is compulsory

Solve any four questions from Question no. 1.

Solve any three questions from the remaining.

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|---|----|--|-----------------|
| 1 | a. | Discuss the objectives of information retrieval systems?   | <b>20 (4x5)</b> |
|   | b. | Explain the process of Structured Text retrieval model.  |                 |
|   | c. | Explain the taxonomy of Information retrieval Model.   |                 |
|   | d. | Explain the role of pattern matching in Information retrieval.   |                 |
|   | e. | Explain multimedia indexing approach.  |                 |
| 2 | a. | Illustrate information retrieval system? Discuss its relationship to DBMS, digital libraries and data warehouses | <b>10</b>       |
|   | b. | Explain in detail about vector-space retrieval models with an example?   | <b>10</b>       |
| 3 | a. | What is local and global analysis and Differentiate between automatic local analysis and global analysis?        | <b>10</b>       |
|   | b. | What is the role of suffix array and suffix tree in information retrieval system with example.                   | <b>10</b>       |
| 4 | a. | What is the Signature File ? Explain the structure of signature files with example?                              | <b>10</b>       |
|   | b. | What is the significance tf and idf ? How can you calculate tf and idf in vector model?                          | <b>10</b>       |
| 5 | a. | Compare and contrast evaluation of ranked and unranked Retrieval Results ?                                       | <b>10</b>       |
|   | b. | Explain Query Processing in context of Distributed IR?   |                 |
| 6 |    | Write short notes on <b>any two</b>  | <b>20</b>       |
|   | a. | Rocchio method for Query expansion   |                 |
|   | b. | Parametric and zone indices  |                 |
|   | c. | Latent Semantic Indexing Model   |                 |
|   | d. | Flat browsing vshypertext browsing model.  |                 |