

14/12/2024 IT SEM-VII C SCHEME IRS (DLOC-IV) QP CODE: 10065526

**Time: 3-Hours**

**Max. Marks: 80**

N.B

1. Q.1 is compulsory
2. Attempt any three from the remaining five questions.
3. Assume suitable data, if required and state it clearly.

Q1 Attempt all

**20M**

- a. Discuss Objective of IRS.
- b. Illustrate different markup languages with its applications.
- c. Explain the process of Structured Text retrieval model.
- d. Illustrate different types of keyword-based queries.

Q 2. Attempt all.

**20M**

- a. Consider the following documents  
D1: I went to the park to play      D2: park is nearby to play  
D3: going to the park is fun      Q: park nearby play  
Apply vector model to rank the above documents.
- b. Write different issues for modeling natural language and find solution for it.

Q3. Attempt all.

**20M**

- a. Explain Suffixes, Suffix Trie and Suffix tree, Suffix array and Supra Index with example.
- b. Define Multimedia information retrieval. Discuss Multimedia indexing and searching.

Q 4. Attempt all.

**20M**

- a. Discuss Huffman Algorithm in detail with suitable example
- b. What is inverted Index? Describe the process of creating an inverted index without stop words for the following example.

**This is a text. A text has many words. Words are made from letters.**

Q.5. Attempt all.

**20M**

- a. Discuss various phases of text preprocessing within a document. Discuss any one application for the same.
- a. Explain Probabilistic Retrieval Model. Compare and contrast Belief Network Model and Inference Network Model

Q 6. Write short note

**20M**

- a. User relevance feedback
- b. Information Retrieval in digital libraries
- c. Starting points
- d. Interface support for the search process