



III B.Tech I Sem Supply End Examination, December 2022

Information Retrieval Systems

(CSE)

Time: 3 Hours.**Max. Marks: 70**

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part – A, answer all questions which carries 20 marks.

3. In Part – B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

PART- A**(10*2 Marks = 20 Marks)**

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|-------|--|----|-----|----|
| 1. a) | Explain about Miscellaneous Capabilities | 2M | C01 | L1 |
| b) | What are the basic steps involved in the search process for information retrieval? | 2M | C01 | L2 |
| c) | What is Hypertext data structure? | 2M | C02 | L1 |
| d) | What is a signature and how to construct signature file. | 2M | C02 | L2 |
| e) | What is Relevance Feedback? | 2M | C03 | L1 |
| f) | Discuss hypertext linkages | 2M | C03 | L4 |
| g) | List the aspects of the Visualization Process | 2M | C04 | L1 |
| h) | What is high-precision search? | 2M | C04 | L4 |
| i) | What are the objectives of text search algorithms in IRS? | 2M | C05 | L2 |
| j) | What is feature extraction in multimedia IR? How is it helpful for data retrieval? | 2M | C05 | L3 |

PART- B**(10*5 Marks = 50 Marks)**

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|-----------|---|-----|-----|----|
| 2 | Define Information Retrieval System. Explain the objectives of the Information Retrieval System | 10M | C01 | L2 |
| OR | | | | |
| 3 | What is a Browse capability? Explain about various browse capabilities. | 10M | C01 | L1 |
| 4 | Apply the porter stemming algorithm for the following words:
irresponsible, informative, unrespectable | 10M | C02 | L3 |
| OR | | | | |
| 5 | Describe how a bigram data structure would be used to search for the search term "computer science". What are the possible sources of errors that could cause non-relevant items to be retrieved? | 10M | C02 | L3 |

- 6 What is the purpose of Thesaurus? Explain what it contains. 10M C03 L2
- OR**
- 7 Differentiate between Manual Clustering and Automatic Term Clustering. Explain with suitable examples. 10M C03 L2
- 8 Discuss the difficulties of a user being able to correlate his search to the Hit file. What approach is to be used to overcome these problems? 10M C04 L2
- OR**
- 9 Write short notes on the following with examples
i) Similarity measures ii) Ranking algorithms 10M C04 L1
- 10 List out the differences between Boyer-Moore text search algorithm and Knuth-Pratt-Morris algorithm 10M C05 L2
- OR**
- 11 What algorithmic basis is used for the GESCAN and Fast Data Finder hardware text search machines? 10M C05 L2

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CO - Course Outcome

BL - Blooms Taxonomy Levels