SEM 7 IT IRS QB

10 Marks questions

1. Explain taxonomy of information retrieval model with classification diagram
2. Explain various phases of text preprocessing within a document. Discuss any one application for same
3. Discuss Huffman Algorithm in detail with suitable example
4. What is the purpose of using keyword based query? Briefly explain any 3 types of keyword based queries.
5. What is human-computer interaction? List and discuss any four design principles of human computer interaction.
6. Describe the process of creating inverted index with example. How this process can be optimized using block addressing?
7. What is starting point? Explain list of collections and overviews in detail.
8. Discuss sequential searching. Explain any one algorithm used in sequential searching.
9. Interface support for the search process
10. Multimedia indexing approach
11. Document clustering
12. Explain Relevance Feedback. Discuss the contribution of relevance feedback for quality IR.
13. Discuss automatic local analysis, with suitable example.
14. Discuss Multimedia IR Mode
15. Explain Object Oriented and Object Relational DBMS.
16. Write a note on Scalar and Metrics Clusters.
17. What is Query Specification? Describe direct manipulation and natural language in the context to Boolean query formulation
18. State the different types of queries. Explain the pattern matching query concept with an example.
19. What is the significance of tf and idf? How can you calculate tf and idf in a vector model?
20. Explain ranking and similarity measures with suitable example
21. What is flat browsing and hypertext browsing? Explain.
22. Define Multimedia information retrieval. Discuss indexing and searching.
23. Discuss automatic local analysis, with suitable examples.
24. Summarize two visualization techniques with respect to user interface design.
25. Write different issues for modeling natural language and find solution for it.
26. Explain Suffixes, Suffix Trie and Suffix tree, Suffix array and Supra Index with example.
27. 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.**
28. Show taxonomy of IR models and recall browsing models in detail.
29. Explain Probabilistic Retrieval Model. Compare and contrast Belief Network Model and Inference Network Model
30. Explain Boolean Models in detail with example.
31. Construct a Suffixs, suffix trie and suffix tree, suffix array and supra index for the above sample
    Roses are red. Red roses are beautiful. Many people like red roses.
32. Apply Boyer Moore algorithm to construct bad match table and find the index of the given pattern for the string below with steps
    String: STUDENTS ARE SMART I LIKE SMART STUDENTS
    Pattern: SMART
33. Consider a very small collection C that consists in the following three documents:
    d1: "beautiful garden" d2: "evening garden time" d3: "garden time is beautiful"
    Given the following query: "garden time", calculate the rank of each document using vector space retrieval model. (Use tf-idf vector for the query, and compute the score of each docent in C relative to this query, using the cosine similarity measure.)
34. 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.
35. Different types of Information Systems
36. Different markup languages and its applications.

5 Marks questions

1. Recall objectives of Information Retrieval Process
2. Differentiate between Information versus Data Retrieval.
3. Identify the various task performed by web search engine.
4. Importance of metadata and its types.
5. Illustrate different markup languages with its applications.
6. Explain the process of Structured Text retrieval model.
7. Starting Points
8. Illustrate different types of keyword-based queries.
9. User relevance feedback
10. Information Retrieval in digital libraries
11. Interface support for the search process
12. Define data modeling ? Explain any two types of data models.
13. Compare and contrast Proximity Queries and Wildcard Queries .
14. What is the purpose of a search engine?. List the steps of search operation by search engine.
15. Sequential Search
16. Document clustering .
17. Multimedia indexing
18. Compare boolean model and vector model
19. Discuss concept of Text search engine
20. Explain inverted file indexing with suitable examples
21. Lexical analysis.
22. 2. Web information retrieval system
23. Automatic feature extraction.
24. Statistical text compression and Dictionary based text compression
25. Explain Classic Information Retrieval models.
26. Define Natural Language with features and applications.
27. List and define different parameters to judge the quality of information.
28. Explain search engine Architecture
29. Explain logical view of a document with diagram.
30. How does search engine retrieves the information?
31. Describe metasearchers and it merits with example.