Reg. No. | | | | | | | | | | | |

Question Paper Code: X11182

B.E./B.Tech. DEGREE EXAMINATIONS APRIL / MAY 2021

Eighth Semester

Computer Science Engineering

CS8080 Information Retrieval Techniques

Common to Information Technology

(Regulations 2017)

Time : 3 Hours | Answer ALL Questions | Max. Marks: 100

PART-A (10 x 2 = 20 Marks)

1. Enumerate the purpose of Information Retrieval.
2. Identify the types of search engines.
3. Compare Term Frequency and Inverse Document Frequency.
4. Define relevance feedback.
5. What is Hierarchical agglomerative clustering?
6. Infer Inverted Index with an example.
7. Write down the techniques of SPAM.
8. What is a Web Crawler?
9. Point out the advantages of content based filtering.
10. When collaborative filtering can be used?

PART- B (5 x 13 = 65 Marks)

11. a) Summarize the features of Information Retrieval and the problems involved in IR system. (13)

OR

b) Illustrate the working of search engine with suitable examples. (13)

12. a) Explain Boolean Retrieval model and Vector space model with a neat diagram. (13)

OR

b) Summarize a comparative study on Latent semantic indexing model and Neural network model. (13)

13. a) Explain in detail about k-nearest neighbor classifier with an illustration. (13)

OR

b) Summarize in detail about Naive Bayes text classification and list down the properties of Naive Bayes. (13)

14. a) Demonstrate in detail about search engine optimization. (13)

OR

b) Analyse in detail about Near-duplicates and examine the behaviour of a web crawler. (13)

15. a) Classify and explain recommendation techniques with suitable examples and list it's advantages and disadvantages. (13)

OR

b) Explain about Matrix Factorization and narrate in detail about Neighborhood models. (13)

PART-C (1 x 15 = 15 Marks)

16. a) Design and develop a web search engine architecture. List the applications of web crawler and explain how domains are newly hosted in the web. (15)

OR

b) Describe in detail about the working of IR Architecture with a neat diagram and summarize the retrieval and ranking process with suitable examples. (15)