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Question Paper Code : 91379

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019
Seventh Semester
Computer Science and Engineering
CS6007 – INFORMATION RETRIEVAL
(Regulations 2013)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

PART – A

(10×2=20 Marks)

1. What is an index vocabulary ?
2. Define hyper link.
3. What is grepping through text ?
4. Define ad hoc retrieval.
5. What is spam ?
6. Outline the difference between lossy compression and lossless compression.
7. Outline the importance of link analysis.
8. What is cross-lingual retrieval ?
9. Outline the difference between classification and clustering.
10. State Bayes' theorem.

PART – B

(5×13=65 Marks)

11. a) Draw the framework of an open source search engine and present an outline of its components. (13)
- (OR)
- b) What is artificial intelligence ? Outline the role of artificial intelligence in information retrieval. (13)



12. a) How a document and a query are represented using the Boolean model ? How the relevance of a document to a user query is defined ? Outline with an example. (13)
- (OR)
- b) i) What are inverted indices ? Give example. (5)
ii) Outline latent semantic indexing with an example. (8)
13. a) What is search engine optimization ? Outline the issues to be addressed for search engine optimization. (13)
- (OR)
- b) Outline the steps in mapping of an XML document to a set of lexicalized subtrees with an example. (13)
14. a) Outline the steps in the Hyperlink-Induced Topic Search (HITS) algorithm with an example. (13)
- (OR)
- b) What is a distributed file system ? Present an outline of Map Reduce and Hadoop distributed file system. (13)
15. a) What is a decision tree ? Outline the steps in constructing a decision tree with an example. (13)
- (OR)
- b) Explain the steps in the k-means clustering with an example. (13)

PART - C

(1×15=15 Marks)

16. a) i) Outline precision and recall with an example. (8)
ii) Outline the process of computing cosine similarity with an example. (7)
- (OR)
- b) Explain the steps in Naïve Bayes training and Naïve Bayes classification with an example. (15)