

Code No: **R42059 R10**

Set No. 1

IV B.Tech II Semester Regular/Supplementary Examinations, April - 2015 INFORMATION RETRIEVAL SYSTEMS

(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75

Answer any FIVE Questions All Questions carry equal marks

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|---|----|---|------|
| 1 | a) | How the Information Retrieval System is related to Database Management System? | [6] |
| | b) | Explain various types of Information Retrieval Systems. | [9] |
| 2 | a) | What is a Browse capability? Explain about various browse capabilities. | [10] |
| | b) | Explain Document database search. | [5] |
| 3 | a) | Describe how the PAT Data structure is different from N-gram data structure. | [9] |
| | b) | Write short notes on Dictionary look-up stemmers. | [6] |
| 4 | a) | Differentiate Full Item indexing, Public File Indexing and Private File Indexing. | [7] |
| | b) | What is a Pre-coordination? How it is different from linkages? | [8] |
| 5 | a) | What is a cluster? Give the hierarchy of Clusters. | [8] |
| | b) | Explain the process of Thesaurus generation. | [7] |
| 6 | a) | Discuss the weighted searches of Boolean systems. | [8] |
| | b) | What are the processing steps used in automatic relevance feed back to enhance user query? Explain. | [7] |
| 7 | a) | Write about information visualization technologies. | [8] |
| | b) | Discuss the terms Cognition and Perception of information visualization. | [7] |
| 8 | a) | Explain various Software text search algorithms. | [9] |
| | b) | What is TREC results and how it can be used in information system evaluation? | [6] |



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Set No. 2

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(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75 **Answer any FIVE Questions** All Questions carry equal marks Describe the functional overview of Information Retrieval System. [8] How data warehouses are housed as a source of Information systems? [7] 2 a) Explain how the search process takes place when the information is retrieved. [6] What is concept indexing approach? Explain in detail with a suitable example. [9] 3 a) Explain in detail about stemming process. [9] b) Write short notes on Inverted File structures. [6] Explain about classes of Automatic Indexing. 4 a) [10] Briefly describe about Statistical Indexing. b) [5] Explain various techniques in Automatic Term Clustering. 5 a) [10] Describe briefly Item clustering. [5] Why is relevance feedback required in User Search Techniques? Explain. [9] 6 a) Describe briefly why Search Statements and Binding are required. [6] Explain the main aspects of human visualization process. 7 a) [8] Explain various information visualization technologies. [7] 8 a) Differentiate between Boyer-Moore Algorithm and Knuth-Pratt algorithm. [6] Explain briefly Hardware text search systems. [9]

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Set No. 3

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(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75 **Answer any FIVE Questions** All Questions carry equal marks **** Explain various types of Information Retrieval Systems. [7] How Digital Libraries can be used as Information base Systems? [8] Explain the usage of Cataloging and Indexing in Information Retrieval Systems. [9] Explain the data flow in an information processing system with a neat sketch. b) [6] 3 a) Describe briefly Hypertext data structure. [7] b) Discuss the Porter stemming algorithm [8] Explain the role of automatic indexing in Natural languages. [8] a) How Pre-coordination is different from Hypertext linkages? Explain b) [7] 5 a) Distinguish term clustering and item clustering. Explain with suitable examples [8] b) What is the need of Thesaurus in a document and how it can be generated? [7] Briefly describe the concept of Ranking. [6] b) Explain the similarity measures that can be used in User search techniques. [9] Describe the need for information visualization. Under what circumstances is [9] information visualization is not useful? Quote an example. b) Describe briefly the terms Cognition and Perception [6] 8 a) What are the various Text search algorithms? Explain them in detail. [10] b) Explain the concept of push and pull process. [5]



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Set No. 4

IV B.Tech II Semester Regular/Supplementary Examinations, April - 2015 INFORMATION RETRIEVAL SYSTEMS

(Computer Science and Engineering)

Time: 3 hours Max. Marks: 75 **Answer any FIVE Questions** All Questions carry equal marks 1 a) Describe the functional overview of Information Retrieval System [8] b) What is the need of Information retrieval systems and what are its objectives? [7] Explain the Browse capabilities of Vocabulary, Ranking, Canned query and Multimedia. [10] b) Describe the automatic indexing. [5] Describe Signature file structure. [6] b) Explain various Stemming algorithms. [9] What is concept indexing approach? Explain in detail with a suitable example. [8] Write about the Hypertext linkages. [7] Explain the process involved in Term clustering. [9] Write short notes on Thesaurus. b) [6] Explain Selective dissemination of information search 6 a) [8] Describe briefly Online IR systems and OPACs. [7] 7 Describe the need for information visualization. [7] Explain the main aspects of human visualization process. [8] 8 a) Explain the Boyer-Moore text search algorithm with an example. [8] b) How the information system is evaluated and what are the measures used in it? [7]