Code No: 07A71201 **R07** **Set No. 2**

**IV B.Tech I Semester Examinations,November 2010**
**INFORMATION RETRIEVAL SYSTEMS**
**Information Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

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1. Explain about overgeneration and fallout metrics? [16]
2. (a) What are the design objectives of a signature file system?
   (b) How much time does search of the signature matrix require? [8+8]
3. Explain about the algorithm called inverse document frequency? Explain the unnormalized weighting formula? [16]
4. Compare Boolean query and Natural Language Queries with an example? [16]
5. (a) Explain about Vocabulary Domains?
   (b) Define the terms Precision and Recall? [8+8]
6. Define HACM? Explain Lance-Williams dissimilarity update formula? [16]
7. Explain about similarity measures? [16]
8. What are the major changes with TREC 8? Explain TREC-4 systems? [16]

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Code No: 07A71201 **R07** **Set No. 4**

**IV B.Tech I Semester Examinations,November 2010**
**INFORMATION RETRIEVAL SYSTEMS**
**Information Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

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1. Explain the two classes of indexes belonging to automatic indexing? [16]
2. What is the use of probability theory? Explain PRP and plausible corollary? [16]
3. Distinguish between Search Capabilities and Browse Capabilities? [16]
4. Explain the differences between Information Retrieval Systems and DBMS? [16]
5. Explain a dictionary look-up mechanism? [16]
6. (a) What is a hash value? What are the drawbacks of Boyer-Moore algorithm?
   (b) What are the trades offs between using the Aho-Corasick versus Boyer-Moore algorithms? [6+10]
7. (a) What is ward's method?
   (b) Explain the Scatter/Gather system?
   (c) What are the uses of dendograms? [5+5+6]
8. Access the Internet and locate three information visualization techniques that are available. Describe what cognitive engineering principles are being used in the techniques? [16]

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Code No: 07A71201 **R07** **Set No. 1**

**IV B.Tech I Semester Examinations,November 2010**
**INFORMATION RETRIEVAL SYSTEMS**
**Information Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

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1. What are the characteristics of the computers used in assisting indexing process? [16]
2. (a) Define vector space model? Represent a three dimensional vector assuming three processing tokens: Petroleum, Mexico, and Oil?
   (b) What is the use of audio transcription? [8+8]
3. (a) Explain about NISO organization?
   (b) What is Internet Engineering Task Force used for?
   (c) Explain the features of Z39.50 standard? [6+5+5]
4. Explain the Hypertext history? [16]
5. Compare Digital Libraries and Data Warehouses? [16]
6. (a) Explain LMDS system?
   (b) Write short notes on PLS system?
   (c) Explain about Retrievalware and InRoute software systems? [6+4+6]
7. Which of the guidelines and additional decisions can be incorporated in an automatic statistical thesaurus construction program? Describe how they would be implemented and the risks with their implementation. Describe your justification for the guidelines and exercises selected that cannot be automated? [16]
8. What is the relationship between precision and TURR? [16]

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Code No: 07A71201 **R07** **Set No. 3**

**IV B.Tech I Semester Examinations,November 2010**
**INFORMATION RETRIEVAL SYSTEMS**
**Information Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

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1. (a) Explain about the major assumption made in Bayesian model?
   (b) Is this assumption true? Give examples? [4+12]
2. Define the term Data Warehouse? What are the similarities between data warehouse and Information retrieval systems? [16]
3. (a) Explain the formula for simple measure of two terms?
   (b) Explain the methodology to create the clusters using cliques? [5+11]
4. Explain PAT tree data structure? Define sistring? Give examples of sistrings? [16]
5. (a) Define augmentation? Explain about CASSM system?
   (b) Define Fast Data Finder? What are the functions supported by Fast Data Finder? [8+8]
6. What is the purpose of WAIS standard? Explain the original development of WAIS? What the developers of WAIS pursued? [16]
7. How would you define an item on the internet with respect to a search statement and similarity function? [16]
8. Explain about the different algorithms used to produce summaries? [16]

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