Code No: **R42059**   **R10**   Set No. 1

IV B.Tech II Semester Supplementary Examinations, April - 2018
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) Define Information Retrieval System. Explain the objectives of the Information Retrieval System. [8]
  b) What is the difference between the concept of a "Digital Library" and an Information Retrieval System? What new areas of information retrieval research may be important to support a Digital Library? [7]

2 a) Trade off the use of precoordination versus postcoordination. [8]
  b) Explain about Multimedia Indexing. [7]

3 a) Explain the following data structures giving suitable examples:
     (i)   N-gram
     (ii) PAT [8]
  b) Explain about Successor stemmer with example. [7]

4 a) What is the problem with weighting schemes? [8]
  b) Explain Bayesian model with an example. [7]

5 a) Differentiate between Manual Clustering and Automatic Term Clustering. Explain with suitable examples. [8]
  b) Explain the process of Thesaurus generation. [7]

6 a) What is a similarity measure? Why Normalization factor is required for similarity measures? Briefly describe the threshold process. [8]
  b) Describe briefly why Search Statements and Binding are required. [7]

7 a) Explain the main aspects of human visualization process. [8]
  b) What is cognition and what is perception? What is Preattentive Detection Mechanism? [7]

8 a) What algorithmetic basis is used for the GESCAN and Fast Data Finder hardware text search machines? [8]
  b) List out the differences between Boyer-Moore text search algorithm and Knuth-Pratt-Morris algorithm. [7]