Code No: C4010, C2508
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I - Semester Examinations March/April-2011
INFORMATION RETRIEVAL SYSTEMS
(COMMON TO INFORMATION TECHNOLOGY, SOFTWARE ENGINEERING)
Time: 3hours   **Max.Marks:60**
Answer any five questions
All questions carry equal marks
- - -

1. a) Explain the concepts "Precision" and "Recall" .
   b) Write any two objectives of Information Retrieval Systems.
   c) Explain briefly functional overview of Information Retrieval Systems. [12]

2. Explain the following IR System Capabilities
   a) Search capabilities
   b) Miscellaneous Capabilities   [12]

3. a) Discuss about Precoordination and Linkages in the Indexing Process.
   b) How is Information Extraction different from the Indexing Process?
   c) Explain about "Document Summarization Process"   [12]

4. a) Explain in detail about " Inverted File Structure".
   b) Explain in detail about PAT file structure.
   c) Write short notes on XML data structures.   [12]

5) Write a short notes on the following
   a) Bayesian Model
   b) Concept Indexing
   c) Simple Term Frequency Algorithm   [12]

6) a) Explain in detail about Manual Clustering Process.
   b) Consider the following Term – Term matrix

	T1	T2	T3	T4	T5
T1	1	1	1	1	
T2	1	0	1	0	
T3	1	0	1	0	
T4	1	1	1	0	
T5	1	0	0	0	

   Determine the clusters using Clique and Single Link Techniques.   [12]

7) a) What are the six key characteristics of intelligent agents used in the searching of the Internet and the hypertext.
   b) Explain the following Information Visualization Technologies
      i) Perspective Wall
      ii) Cone Tree   [12]

8) Explain in detail software text search algorithms with examples.   [12]

*****