

Total No. of Questions : 12]

SEAT No. :

P1479

[Total No. of Pages : 3

[4164] - 732 ✓

May - June 2012

B.E. (Information Technology)
INFORMATION RETRIEVAL
(2008 Pattern) (Sem. - II)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:-

- 1) *Answers to the two sections should be written in separate books.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data, if necessary.*

SECTION - I

- Q1)** a) With the help of block diagram explain typical Information Retrieval System. **[8]**
- b) Explain Measures of Association in detail. **[4]**
- c) What do you mean by Cluster. State and Explain Cluster Hypothesis. **[6]**

OR

- Q2)** a) What do you mean by Cluster. State and explain Cluster Hypothesis. **[4]**
- b) State Zipf's Law, Explain Luhn's Idea. **[6]**
- c) Explain Graph Theoretic approach for clustering and draw the cluster derived from the given similarity matrix where Threshold = 0.89 and **[8]**

1	.6					
2	.6					
3	.9	.8				
4	.9	.7	.7			
5	.9	.6	.6	.9		
6	.5	.5	.5	.9	.5	
	1	2	3	4	5	6

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- Q3) a) Explain Inverted Index file. How it can be used in Information Retrieval. [8]
b) Explain Vector Model in detail. [8]

OR

- Q4) a) Explain with an example organization of records in Multi-lists, state its Advantages over Inverted Files. [8]
b) Explain the different kinds of Search strategies. [8]

- Q5) a) Discuss the five key abstractions used to design or model Digital Libraries. [10]
b) Explain Harmonic Mean and E measure. [6]

OR

- Q6) a) Explain need for Single Value Summaries and various strategies in detail. [10]
b) Write short note on TREC. [6]

SECTION - II

- Q7) a) Describe MIMD architecture with respect to Parallel IR. How inverted file is used for MIMD. [10]
b) Define Ontology? Explain in detail reasons to develop Ontology? [8]

OR

- Q8) a) Explain Collection Partitioning, source selection and query processing with respect to Distributed IR. [10]
b) What is parallel computing? Discuss performance measures of parallel computing. [8]

- Q9) a) How image analysis and image access accomplished in MULTOS Data Model. [8]
b) Explain the Generic Multimedia Indexing Approach. [8]

OR

- Q10) a) Discuss the application of the GEMINI approach for Two- dimensional Color Images. [8]
b) Discuss Uncertainty, Proximity, and Weights in Query Expressions. [8]

Q11) a) Discuss different forms of searching the web. Explain with proper example. [8]

b) Explain the crawler-indexer architecture. [8]

OR

Q12) a) Write short notes on: Web Data Mining. [8]

b) What is Collaborative Filtering. Discuss its Advantages and Disadvantages. [8]

