Total No. of Questions : 12]

P802

[Total No. of Pages : 3

[Max. Marks : 100

SEAT No. :

[4659]-215 B.E. (Information Technology) (Semester - II) INFORMATION RETRIEVAL (2008 Pattern)

Time : 3 Hours]

Instructions to the candidates :

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6 from Section I & Q7 or Q8, Q9 or Q10, Q11 or Q12 from Section II.
- 2) Answers to the two sections should be written in separate answer sheets.
- 3) Neat diagrams should be drawn wherever necessary.
- 4) Figures to the right side indicate full marks.
- 5) Use of electronic pocket calculator is allowed.
- 6) Assume suitable data, if necessary.

SECTION - I

Q1)	a)	How to generate the Document representative using Conflation Algorithm.
		[10]
	b)	Explain Luhn's idea for understanding the context of the document. [8]

OR

Q2)	a)	What is the use of Clustering in IR? Explain Clustering Hypothesis	Clustering Hypothesis for	
		R-R and R-N-R associations of Collections. [1	0]	
	b)	Differentiate between Data and Information Retrieval.	[8]	
Q3)	a)	Explain how Records are organized in Multi-lists state with an examp	ple	

and its advantage over inverted files.[8]b) Explain different types of Search strategies.[8]

OR

Q4)	a)	Explain inverted index file concept with example.	[8]
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b) What is the role of XML in Information Retrieval? Explain XML data model and evaluation of queries. [8]

- *Q5)* a) Explain the TREC Collection.
 - b) Explain the term.
 - i) R-Precision
 - ii) Precision Histogram
 - iii) The Harmonic Mean
 - iv) The E Measure

OR

Q6)	a)	Explain various challenges for effective delivery of Digital	l Library
		Architecture.	[8]
	b)	Write brief note on OPACs.	[8]

SECTION - II

Q7) a) Write note on Ontology and the Ontology Life Cycle. [10]
b) Write brief note on "Query processing in a Distributed IR system". [8]

OR

Q8)	a)	Describe MIMD architecture with respect to "Multitasking" in Para	allel
		IR.	[10]
	b)	Compare Distributed IR and Parallel IR.	[8]

Q9) a) What is Multimedia IR? Discuss steps on which of data retrieval relies.[8]
b) Explain the steps involved for retrieving data in Multimedia IR systems.
[8]

OR

Q10) a)	Explain the MULTOS data model with example.	[8]
b)	Write short note on.	[8]

- i) SQL3 query language
- ii) Generic multimedia indexing

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Q11) a) Explain the centralized crawler-indexer and Harvest-distributed architecture of a search Engine.[8]

[8]

- b) Write short note on.
 - i) Meta searchers
 - ii) Metacrawler

OR

- **Q12)** a) Explain how web search engine works. [8]
 - b) Write short note on Dynamic search and Software Agents. [8]

