

Total No. of Questions : 12]

SEAT No. :

P802

[Total No. of Pages : 3

[4659]-215

**B.E. (Information Technology) (Semester - II)**

**INFORMATION RETRIEVAL**

**(2008 Pattern)**

*Time : 3 Hours]*

*[Max. Marks : 100*

*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 for R-R and R-N-R associations of Collections. [10]  
b) Differentiate between Data and Information Retrieval. [8]

- Q3)** a) Explain how Records are organized in Multi-lists state with an example 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]  
b) What is the role of XML in Information Retrieval? Explain XML data model and evaluation of queries. [8]

**P.T.O.**

- Q5)** a) Explain the TREC Collection. [8]  
b) Explain the term. [8]  
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 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 Parallel 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

- Q11)** a) Explain the centralized crawler-indexer and Harvest-distributed architecture of a search Engine. [8]
- b) Write short note on. [8]
- 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]

