

Total No. of Questions : 12]

SEAT No. :

P3417

[4959]-192

[Total No. of Pages : 3

**B.E.(Information Technology)
INFORMATION RETRIEVAL
(2008 Pattern) (414449)**

Time :3Hours]

[Max. Marks :100

Instructions to the candidates:

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10, Q11 or Q12.*
- 2) *Answer to the two sections should be writtern in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*
- 5) *Assume suitable data if necessary.*

SECTION-I

Q1) a) In your words explain what do you mean by Information Retrieval? Also explain the Information Retrieval System with the help of block diagram. **[8]**

b) Explain in detail various paramenters used while designing any clustering algorithm. **[8]**

OR

Q2) a) What are different constituents of Classification methods and with proper example explain relations that exist among them **[8]**

b) Explain Hierarchic clustering Algorithm? Comment if Hierarchic methods are suitable for document clustering? **[8]**

Q3) a) Explain Vector Model in detail. **[8]**

b) Explain Ring Structure. Discuss its Advantages and Disadvantages. **[8]**

OR

Q4) a) What do you mean by coordination level? For the following query what If for the following Ki list the set of documents are: **[6]**

K1- list: D1, D2,D3,D4

K2-List: D1, D2

K3-List: D1,D2,D3

K4-List: D1

Then query $Q=K1 \text{ AND } K2 \text{ AND } K3$ find out the ranking

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- b) Explain Sequential files and their advantages and Disadvantages in detail. [6]
- c) Write note on: Suffix Array [4]
- Q5) a)** Explain the terms Precision and Recall. [8]
- Assume the following:
- A database contains 80 records on a particular topic
 - A search was conducted on that topic and 60 records were retrieved.
 - Of the 60 records retrieved, 45 were relevant.
- Calculate the precision and recall scores for the search.
- b) Explain user oriented measures with the help of venn diagram. [6]
- c) Write Note on: OPAC [4]
- OR
- Q6) a)** Discuss the architectural issues in Digital library. [8]
- b) Explain Alternative Measures in detail. [6]
- c) Write note on : TREC [4]

SECTION-II

- Q7) a)** Describe Ontology in Information Retrieval and its use? [8]
- b) What is Parallel Computing? Explain taxonomy of parallel architectures [8]
- OR
- Q8) a)** With respect to various aspects discuss MIMD architectures. [8]
- b) Define Ontology? Explain in detail reasons to develop Ontology. [8]
- Q9) a)** What is the role of Multimedia in commercial Database Management System? [8]
- b) Discuss MULTOS in short [8]

OR

- Q10)** a) Write note on Generic Multimedia Indexing Approach(GEMINI)? [8]
b) Discuss SQL3 in short. [8]

- Q11)** a) Discuss the centralized architecture of the search engine: Enlist the drawbacks of Harvest architecture. [12]
b) What do you mean by web crawler and briefly explain the working of web crawler [6]

OR

- Q12)** a) Write short notes on: Challenges in web search. [6]
b) What is Web Usage mining. [6]
c) Explain Meta searches with example. [6]

