SEAT No. :

P4009

[Total No. of Pages : 2

[5561]-716

B.E. (Information Technology)
INFORMATION STORAGE & RETRIEVAL
(2015 Course) (414464B) (Semester - II) (Elective - III)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:
  1) *Neat diagrams must be drawn wherever necessary.*
  2) *Figures to the right side indicate full marks.*
  3) *Assume suitable data if necessary.*

Q1) a) Differentiate between data retrieval and information retrieval. **[6]**

  b) List with definition different measures of association. **[4]**

OR

Q2) a) Compare Boolean and vector model. **[6]**

  b) List and explain steps of conflation algorithm. **[4]**

Q3) a) Explain the terms Harmonic mean, E measure, R precision, Precision histogram. **[5]**

  b) Explain basic concept for Information Retrieval. Draw IR system block diagram. **[5]**

OR

Q4) a) Dissimilarity matrix is given as follows. **[5]**

```
1
2    0.6
3    0.6  0.8
4    0.9  0.9  0.7
5    0.9  0.6  0.6  0.9
6    0.5  0.5  0.9  0.5  0.5
     1    2    3    4    5    6
```

  Threshold 0.4, 0.6, 0.8, 0.9.

  Apply single link algorithm and calculate cluster for above 6 objects.

  b) Explain signature structure in detail. **[5]**

Q5) a) What do you understand by multimedia query language? Explain various query predictors. **[9]**
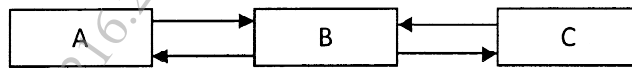
  b) Explain GEMINI approach for multimedia IR. **[9]**

OR

P.T.O.

Q6) a) Describe multimedia data support in commercial DBMS. **[9]**

b) Describe the architecture of distributed IR. **[9]**

Q7) a) What is web crawling? Explain techniques used by web crawlers to crawl the web. **[8]**

b) Write short note on web data mining. **[8]**

OR

Q8) a) Discuss the challenges involve in web search engine. **[8]**

b) What is page ranking? Calculate page rank of following web pages. Assume damping factor 7.0. **[8]**

Q9) a) Define Recommender system? Explain in brief collaborative filtering. **[8]**

b) Explain semantic web in detail. **[8]**

OR

Q10) a) Write a note on "Ontology languages for semantic web". **[8]**

b) Explain the method for extracting data from text. **[8]**

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