Total No. of Questions : 8]

SEAT No. : [ ]

PA-945

[Total No. of Pages : 2

[5927]-391

B. E. (Information Technology)

INFORMATION AND STORAGE RETRIEVAL

(2019 Pattern) (Semester - VII) (414441)

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Assume suitable data, if necessary.***

Q1) a) In information retrieval, if q is the information request and a set of relevant documents for query q is Rq = (d3, d5, d9, d25, d39, d44, d50, d70, d80, d120). Consider new retrieval algorithm has been designed and has been evaluated for information request q returns, ranking of the documents in the answer set is as follows. **[6]**

1)	d120	9)	d143
2)	d84	10)	d25
3)	d50	11)	d38
4)	d6	12)	d48
5)	d8	13)	d230
6)	d9	14)	d113
7)	d58	15)	d3
8)	d129		

The documents that are relevant to the query q are underlined. Calculate precision and recall for the documents that are relevant to the query q.

b) What are measures used to evaluate system performance? **[6]**

c) What are various techniques used to specify query in information visualization? **[6]**

OR

P.T.O.

Q2) a) What are User oriented measures used in performance evaluation of IR systems. **[6]**

b) Define Precision and Recall. Give example of each and justify its use in evaluating IR system. **[6]**

c) What is relevance Judgement? Explain the term group relevance judgements, pseudo relevance feedback. **[6]**

Q3) a) What is distributed IR? Explain the architecture of distributed IR in detail. **[9]**

b) What is Collection Partitioning with respect to distributed IR Explain in detail. **[8]**

OR

Q4) a) Explain in details the working of MULTOS data model. **[9]**

b) What is Query Languages with respect to multimedia IR Explain it in detail. **[8]**

Q5) a) Write a short note on Searching the Web. **[6]**

b) Explain Crawler-Indexer Architecture with neat diagram. **[6]**

c) What is role of crawler in web searching? Explain the strategies used by the web crawler. **[6]**

OR

Q6) a) What is hyperlink? Explain structure of hyperlink and also explain searching using hyperlinks. **[6]**

b) Write a note on characterizing the web. **[6]**

c) Explain Web Scrapping with suitable example. **[6]**

Q7) a) Define Recommender system? Explain in brief Collaborative Filtering. **[9]**

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

OR

Q8) a) Explain difference between Text-centric and Data-centric XML retrieval. **[9]**

b) Explain in detail Content Based Recommendation of Documents. **[8]**

✠ ✠ ✠