

## APR-17/BE/Insem-73

**B.E. (Information Technology) (Semester -II)**  
**INFORMATION STORAGE AND RETRIEVAL**  
**(2012 - Pattern)**

*Time : 1 Hour]**[Max. Marks :30**Instructions to the candidates:*

- 1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6*
- 2) *Neat diagram must be drawn wherever necessary.*
- 3) *Figures to the right indicate full marks.*
- 4) *Assume suitable data if necessary*

- Q1)** a) Explain working of conflation algorithm in detail. Justify use of this algorithm in information retrieval. **[6]**
- b) Write a short note on matching coefficients. **[4]**

OR

- Q2)** a) Why single pass algorithm is better than Rocchio's Algorithm? **[10]**  
 Form the document cluster of following document term matrix using single pass clustering algorithm.

Consider

Membership function : Sum of product

centroid calculation function : Average

Threshold = 11

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	D1	D2	D3	D4	D5
T1	1	1	0	1	1
T2	2	1	2	3	0
T3	3	0	1	0	1
T4	2	2	0	3	0
T5	2	2	1	2	1

**Q3)** a) Compare boolean model and vector model. Explain how vector model can be used to retrieve partial matching documents. [6]

b) What are inverted files? Explain how these file can be used to answer Boolean queries. [4]

OR

**Q4)** a) Explain working of suffix tree. Construct suffix tree for following example "This is a text. A text has many words. Words are made from letters." [6]

b) Explain working of signature files with example? [4]

**Q5)** a) Write a note on user oriented measures used for evaluating the performance of any retrieval system. Also explain their significance. [6]

b) Explain the term ontology creation [4]

OR

**Q6)** a) Write a note on " Ontology languages for semantic web". [5]

b) Explain the trade-off between precision and recall. [5]

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