

Total No. of Questions : 6]

SEAT No. :

P1423

[Total No. of Pages : 2

BE/Insem./APR-259

B.E. (Information Technology)

INFORMATION STORAGE AND RETRIEVAL

(2015 Course) (Semester -II) (Elective - III) (414464B)

Time : 1 Hour]

[Max. Marks :30

Instructions to the candidates:

- 1) Solve Q.1 or Q.2, Q.3 Or Q.4, Q.5 or Q.6.
- 2) Figures to right indicate full marks.

- Q1) a) What is a document representative? Explain with a suitable example. [5]
 b) Draw and explain IR system block diagram. [5]

OR

- Q2) a) Explain steps in conflation algorithm using a suitable example. [5]
 b) Write a short note on XML data structures used in IR systems. [5]

- Q3) a) Find the similarity of the following query with documents - D1, D2, D3 using vector model. [5]

| | | |
|----------|--------------------------------------|---------------------|
| Query | Keywords | |
| Q | mouse, dog | |
| Document | Text | Terms |
| D1 | mouse mouse bee | mouse bee |
| D2 | dog bee dog hog hog dog mouse dog | mouse bee dog hog |
| D3 | cat gnu dog eel fox | Cat dog eel fox gnu |

- b) Show how single link clusters may be derived from the dissimilarity coefficient by thresholding it. [5]

OR

P.T.O.

- Q4) a)** Explain Latent Semantic Indexing with a suitable example. [5]
- b) Compare Neural network-based retrieval and Fuzzy set retrieval methods. [5]

- Q5) a)** Define and explain following terms - Precision & Recall. [5]
- b) Define and explain following terms - [5]
- i) MRR
 - ii) NDCG

OR

- Q6) a)** Define and explain following concepts. [5]
- i) Cross fold validation.
 - ii) User oriented measures for performance evaluation.
- b) Define and explain following concepts related to visualization. [5]
- i) User relevance judgement.
 - ii) Interface support for search process.

EEE