R15

Code No: 127DX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, November/December - 2018

INFORMATION RETRIEVAL SYSTEMS

(Common to CSE, IT)

Time: 3 Hours Max. Marks: 75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART- A

(25 Marks)

1.a) Write a short note on inference networks. [2]
b) Explain briefly Boolean Indexing retrieval strategy. [3]
c) What is result set clustering. [2]
d) Briefly explain N-gram retrieval utility. [3]
e) Write a short note on Query translation used in cross language information retrieval. [2]
f) What is pivot language? [3]
g) What is k-scan algorithm [2]
h) Write a short note on duplicate elimination. [3]
i) Write a short notes on Boolean Retrieval. [2]
j) Write a brief note on Page Rank algorithm. [3]

PART-B

(50 Marks)

2. Define vector space model and calculate the Similarity coefficients with an example. [10]

OR

3.a) Explain in detail about Non Binary independence model.
b) Explain the procedure to calculate weighting factor for a term in a document. [5+5]

4. Explain how Relevance feed back is implemented using vector space model. [10]

OR

5.a) Write a short note on Damashek clustering method.
b) Explain in detail how thesaurus is constructed manually. [5+5]

6.a) Explain in detail about R-Distance measure.
b) Write a short note on semantic network retrieval utility. [5+5]

OR

7.a) Explain in detail about Part-of-speech (POS) taggers and word sense taggers.
b) Write a short on parsing of simple phrases. [5+5]

8. What is inverted index? Explain in detail about inverted index compression with an example. [10]

OR

9.a) Explain briefly about query processing.
b) Explain in detail about signature files. [5+5]

10.a) Explain how information retrieval can be considered as a relational application.
b) Explain in detail about multidimensional data model. [5+5]

OR

11.a) Write a short note on evaluation of web search engines.
b) Explain with a neat diagram about distributed information retrieval. [5+5]

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