

R13

Code No: 117DX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, April/May - 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 the assumptions of vector space model. [2]
- b) Define recall and precision. [3]
- c) Define dendogram. [2]
- d) Write the challenges of relevance feedback. [3]
- e) Define index pruning. [2]
- f) What is the inverted file? How is it useful in information retrieval? [3]
- g) Define fusion. [2]
- h) What is semantic network? Give an example. [3]
- i) Define link analysis. [2]
- j) What is high precision search? Explain it briefly. [3]

PART-B

(50 Marks)

- 2.a) What is simple term weight? Explain in detail. [5+5]
 - b) Explain the procedure to rank the components. [5+5]
- OR**
- 3.a) Describe Poisson model. [5+5]
 - b) Give a detailed description on language model. [5+5]
- 4.a) Write about the importance of relevance feed back in probabilistic model. [5+5]
 - b) Explain various method to construct thesauri automatically. [5+5]
- OR**
5. Explain the following. [5+5]
 - a) Rocchio Clustering.
 - b) Result Set Clustering.
- 6.a) Discuss various distance measures in semantic networks. [5+5]
 - b) Explain, how rank is done based on constrained spread activation. [5+5]
- OR**
- 7.a) Explain different approaches for choosing translation in language barrier. [5+5]
 - b) Give a note on language model for cross language information retrieval. [5+5]

8.a) What is inverted index? Explain the methods to construct inverted index? [5+5]
b) What is signature file? Explain. how it is useful in information retrieval.

OR

9.a) What is I-match? Explain in detail? [5+5]
b) Write a note on variable length index compression.

10.a) What is index table? Explain how xml data is stored in index table? [5+5]
b) Explain the searching methods in xml file using relational schema.

OR

11.a) Describe Boolean retrieval model. [5+5]
b) Compare cauterized and distributed information retrieval systems.

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