

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)****Max. Marks: 75****Time: 3 Hours**

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.
- b) Define recall and precision.
- c) Define dendrogram.
- d) Write the challenges of relevance feedback.
- e) Define index pruning.
- f) What is the inverted file? How is it useful in information retrieval?
- g) Define fusion.
- h) What is semantic network? Give an example.
- i) Define link analysis.
- j) What is high precision search? Explain it briefly.

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PART-B**(50 Marks)**

- 2.a) What is simple term weight? Explain in detail.
- b) Explain the procedure to rank the components.

[5+5]

OR

- 3.a) Describe Poisson model.
- b) Give a detailed description on language model.

[5+5]

- 4.a) Write about the importance of relevance feedback in probabilistic model.
- b) Explain various methods to construct thesauri automatically.

[5+5]

OR

5. Explain the following.
 - a) Rocchio Clustering.
 - b) Result Set Clustering.

[5+5]

- 6.a) Discuss various distance measures in semantic networks.
- 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.
- b) Give a note on language model for cross language information retrieval.

[5+5]

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- 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

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- 9.a) What is l-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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