Code No: 117DX **R13**

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.
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 feed back in probabilistic model.
b) Explain various method 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]

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

OR

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

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

OR

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

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