Code No: 117DX

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, November/December - 2017
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)	Define Precision and recall.	[2]
b)	Write a short note on probabilistic Retrieval.	[3]
c)	Write a short note on clustering.	[2]
d)	Explain briefly Thesaurus retrieval utility.	[3]
e)	Define Semantic network.	[2]
f)	Write a short note on parsing.	[3]
g)	What is query processing?	[2]
h)	Write a short note on pattern matching.	[3]
i)	Discuss about relevance ranking	[2]
j)	Write a short note on SIRE approach	[3]

PART-B

(50 Marks)

2.	Explain in detail about Probabilistic model and briefly describe Simple term weights with an example.	[10]

OR

3.	Explain how query is generated using language models with a neat example.	[10]

4.	Explain in detail about Regression analysis with an example and list out its advantages.	[10]

OR

5.a)	Write a short note on hierarchal agglomerative clustering.	
b)	Explain in detail how clustering technique is used for generating Thesaurus.	[5+5]

6.a)	Explain how parsing of single terms is performed in information retrieval.	
b)	Explain in detail about K-Distance measure.	[5+5]

OR

7.a)	Explain how syntactic parsing is carried out for complex phrases.	
b)	Write a short note on crossing the language barrier in information retrieval.	[5+5]

8.a) Explain in detail how shingles are used to determine similarity between different duplicates.
  b) Write a short note on inverted index.   [5+5]

OR

9.a) Explain in detail how can we improve efficiency of an index compression.
  b) Explain in detail about duplicate elimination.   [5+5]

10.a) Explain in detail about centralized information retrieval system model.
   b) Explain in detail about page rank calculation.   [5+5]

OR

11.   Explain how relational DBMS can be extended in order to include information retrieval functionality using historical Progression approaches.   [10]

--ooOoo--