R20

Code No: 873AE

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD MCA III Semester Examinations, September/October - 2022 INFORMATION RETRIEVAL SYSTEMS

Time: 3 Hours Max.Marks:75

Answer any five questions All questions carry equal marks

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- 1. What is Information Retrieval? Explain in detail the Vector Space Model Retrieval Strategy with an example. [15]
- 2. Explain Probabilistic retrieval strategy. Calculate the similarity coefficient and determine the ranking of following documents in Probabilistic retrieval strategy. [15] Q: gold silver truck
 - D1: shipment of gold damaged in a fire
 - D2: delivery of silver arrived in a silver truck
 - D3: shipment of gold arrived in a truck
- 3.a) Explain the use of Probabilistic Model in Relevance Feedback.
 - b) State the concept of Clustering as a Retrieval Utility.

[9+6]

- 4. Write a detailed note on *n*-gram developed by D Amore and Mah with an illustrative example. [15]
- 5. Explain in detail the resources used to implement the Cross-Language Information Retrieval Systems [15]
- 6.a) Discuss Ranking based on Constrained Spreading Activation.
 - b) State the use of POS word sense tagging.

[7+8]

- 7.a) Differentiate "Digital Library" and an "Information Retrieval System". What new areas of information retrieval research may be important to support a Digital Library?
 - b) Define how inverted index allows quick search of a posting list.

[10+5]

8. Discuss in detail about information retrival as relational application.

[15]

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