



R17 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

Subject code: 1E7EI

B.Tech IV Year I Semester Regular Examinations, February 2021

INFORMATION RETRIEVAL SYSTEM

(Computer Science and Engineering)

Maximum Marks: 70

Date: 04.03.2021 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Differentiate search and retrieval strategies
- 2 Define i) vector space ii) term vector
- 3 How user feedback is effectively used in sentiment analysis?
- 4 Analyze the importance of Thesauri in handling semantic ambiguity
- 5 Examine the benefits of Cross-language information retrieval (CLIR) .
- 6 Distinguish language and script with example
- 7 Connect signature file with security
- 8 List down the metrics used for information retrieval
- 9 How to use semantics in information retrieval?
- 10 What are the ways to measure the efficiency of web search?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 a) Draw and explain information retrieval model. (5M)
b) What are probabilistic retrieval strategies?(5M)
OR
- 12 a) How similarity is calculated using cosine similarity, Euclidean distance methods?(5M)
b) Write notes on language models in information retrieval. (5M)
- 13 a) Demonstrate the use of N-grams in natural language processing. (5M)
b) Explain about pseudo relevance feedback. (5M)
OR
- 14 a) List down the different regression algorithms. (5M)
b) Find out the impact of diet using linear regression analysis. (5M)

- 15 Explain about cross language information retrieval. (10M)
- OR
- 16 Explain in detail about information retrieval process in NLP. (10M)
- 17 a) How to represent precision, recall and accuracy in terms of TP,TN,FP,FN?(5M)
b) Summarize the applications of indexing and query processing in information retrieval process. (5M)
- OR
- 18 a) Describe signature file creation. (5M)
b) Explain the various method used for duplicate document detection. (5M)
- 19 a) Give example for structured and semi structured data. (5M)
b) Examine searching techniques for semi structured data. (5M)
- OR
- 20 a) Differentiate syntactic and semantic search. (5M)
b) Analyze the difficulties of information retrieval in distributed environment. (5M)