CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–II–Semester End Examinations (Regular) – April - 2025
INFORMATION RETRIEVAL SYSTEM
(CSM)

[Time: 3 Hours]   **[Max. Marks: 70]**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 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   (20 Marks)

1. a)	What are browse capabilities in an Information Retrieval System?	[2M]
b)	Define an Information Retrieval System and its primary purpose.	[2M]
c)	How does a signature file structure work in an Information Retrieval System?	[2M]
d)	What is the purpose of an N-Gram data structure in indexing?	[2M]
e)	What is the purpose of statistical indexing?	[2M]
f)	What is the main goal of item clustering?	[2M]
g)	What is the purpose of search statements in information retrieval?	[2M]
h)	What does Selective Dissemination of Information (SDI) mean?	[2M]
i)	How does non-speech audio retrieval differ from speech retrieval?	[2M]
j)	What is the primary advantage of hardware-based text search systems?	[2M]

PART-B   (50 Marks)

2. Compare and contrast Information Retrieval Systems with Database Management Systems, Digital Libraries, and Data Warehouses. [10M]

OR

3. Discuss the different types of search capabilities in an Information Retrieval System. [10M]

4. Explain the objectives of indexing and how it has evolved historically in information retrieval systems. [10M]

OR

5. Describe the indexing process and compare manual indexing with automatic indexing. [10M]

6. Compare statistical indexing with natural language indexing. How do they differ in approach and application? [10M]

OR

7.a) How do hypertext linkages contribute to information retrieval in web-based systems? [5M]

 b) Describe document clustering and its role in improving search efficiency. [5M]

8.a) Explain the concept of search statements and binding in information retrieval. How do they impact search results? [5M]

 b) Discuss the importance of information visualization in improving search result interpretation and decision-making. [5M]

OR

9. Explain Selective Dissemination of Information (SDI) and its significance in personalized information retrieval. [10M]

10.a) Explain the different techniques used in text search algorithms and their significance [5M]
in information retrieval.
b) Discuss the role of feature extraction in imagery retrieval and how it improves search [5M]
accuracy.

OR

11. Compare different approaches used in multimedia information retrieval for processing [10M]
and retrieving text, audio, image, and video content.

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