



**ACE**  
**Engineering College**  
**(An Autonomous Institution)**

**Question Paper Code:**

22DS522PE

**ACER22**

**Semester End Examination**  
**III B. Tech- I Semester Regular- January-2025**  
**INFORMATION RETRIEVAL SYSTEMS**  
**(CSD)**

**Time: 3 Hours**

**Max. Marks: 60**

<b>H. T. No</b>										
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*Note: This question paper contains two parts A and B.*

*1.Part A is compulsory which carries 10 marks. Answer all questions in Part A.*

*2.Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b as sub questions*

**PART- A**

**MARKS: 10\*1=10**

**Q.No: 1**

**Question**

**Marks**

- |    |  |   |
|----|--|---|
| a) | What is the primary goal of an information retrieval system?                       | 1 |
| b) | Name two types of retrieval models commonly used.                                  | 1 |
| c) | Provide two examples illustrating how indexing enhances information accessibility? | 1 |
| d) | Explain the concept of term frequency in vector space models.                      | 1 |
| e) | Define stop words and their significance in text processing.                       | 1 |
| f) | What is clustering?  | 1 |
| g) | Describe the concept of personalization in web search.                             | 1 |
| h) | Mention two factors that influence the ranking of search results.                  | 1 |
| i) | What is content-based image retrieval?   | 1 |
| j) | List two techniques used for video information retrieval.                          | 1 |

PART- B

MARKS: 5\*10=50

Q.No	Question Description	Marks
2.	<i>Discuss the evolution of information retrieval systems and their impact on modern applications.</i>	10
	<i>(OR)</i>	
3	<i>Explain with examples how metadata is used to enhance retrieval effectiveness.</i>	10
4	<i>Describe the term weighting schemes in vector space models.</i>	10
	<i>(OR)</i>	
5.	<i>Compare probabilistic and automatic indexing model with examples</i>	10
6	<i>Critically evaluate different methods for handling synonymy in text retrieval.</i>	10
	<i>(OR)</i>	
7	<i>Illustrate how stemming and lemmatization improve retrieval accuracy</i>	10
8	<i>Explain the Rabin-karp algorithm with an example.</i>	10
	<i>(OR)</i>	
9	<i>Analyze the challenges of implementing query expansion in large-scale retrieval systems.</i>	10
10	<i>Explain hardware text search systems in IRS in detail.</i>	10
	<i>(OR)</i>	
11	<i>Discuss the future trends in multimedia information retrieval and their potential applications.</i>	10