**Code No.: R22CS624PE**

| R22 | H.T.No. | | | 8 | R | | | | | |
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**CMR ENGINEERING COLLEGE: : HYDERABAD**
**UGC AUTONOMOUS**
**III–B.TECH–II–Semester End Examinations (Supply) - December- 2025**
**INFORMATION RETRIEVAL SYSTEM**
**(Common for CSE, CSD)**

**[Time: 3 Hours]** **[Max. Marks: 60]**

**Note:** This question paper contains two parts A and B.
Part A is compulsory which carries 10 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** **(10 Marks)**

| | | |
|---|---|---|
| 1. a) | What is an Information Retrieval System? | [1M] |
| b) | Write any two Application Areas of IRS. | [1M] |
| c) | What is automatic indexing? | [1M] |
| d) | What are attributes in XML? | [1M] |
| e) | Define Vector Weighting. | [1M] |
| f) | Write any two advantages of Clustering. | [1M] |
| g) | Define Search statements. | [1M] |
| h) | Define Similarity. | [1M] |
| i) | Define TAP. | [1M] |
| j) | Write any two advantages of Multimedia. | [1M] |

**PART-B** **(50 Marks)**

| | | |
|---|---|---|
| 2.a) | Comparison between Digital Libraries and Data Warehouses. | [5M] |
| b) | Describe the major functional processes in IRS. | [5M] |

**OR**

| | | |
|---|---|---|
| 3. | Explain the Browse & Miscellaneous Capabilities of IRS. | [10M] |
| 4. | Discuss the role of authority control in cataloging and its impact on information retrieval. | [10M] |

**OR**

| | | |
|---|---|---|
| 5. | Explain the N-Gram Data Structure and PAT Data Structure. | [10M] |
| 6.a) | Explain the Extended Bayesian Network model. | [5M] |
| b) | Discuss the Vector waiting model. | [5M] |

**OR**

7. Explain Item clustering with example. [10M]

| | Term1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 | Term 7 | Term 8 |
|---|---|---|---|---|---|---|---|---|
| Item 1 | 0 | 4 | 0 | 0 | 0 | 2 | 1 | 3 |
| Item 2 | 3 | 1 | 4 | 3 | 1 | 2 | 0 | 1 |
| Item 3 | 3 | 0 | 0 | 0 | 3 | 0 | 3 | 0 |
| Item 4 | 0 | 1 | 0 | 3 | 0 | 0 | 2 | 0 |
| Item 5 | 2 | 2 | 2 | 3 | 1 | 4 | 0 | 2 |

| | | |
|---|---|---|
| 8. | Explain the similarity measures and Ranking. | [10M] |

**OR**

| | | |
|---|---|---|
| 9. | Discuss briefly about any three Information Visualization Technologies. | [10M] |
| 10. | Explain the Hardware Text Search Systems. | [10M] |

OR

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|---|---|---|
| 11. | Explain the Graph & Imagery Retrieval. | [10M] |

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