

BACHELOR OF TECHNOLOGY (CBCS) (2020 COURSE)
B.Tech.Sem - VII INFORMATION TECHNOLOGY : SUMMER : 2024
SUBJECT: INFORMATION RETRIEVAL

Day : Tuesday
Date : 14/05/2024

S-24760-2024

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.

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|-----------|---|------|
| Q.1 | Define information retrieval. Enlist and explain the components of information retrieval with suitable example. | (10) |
| OR | | |
| Q.1 | Elaborate with an example the impact of web on IR. | (10) |
| Q.2 | How can you calculate tf (term frequency) and idf (invert document frequency) in vector model? Describe with reference to suitable example. | (10) |
| OR | | |
| Q.2 | Describe with an example Boolean retrieval model. | (10) |
| Q.3 | Explain with an example tokenization and text normalization. | (10) |
| OR | | |
| Q.3 | Explain with reference to suitable example how morphological analysis is done while text processing. | (10) |
| Q.4 | Describe with suitable example naive – Bayes text categorization algorithm. | (10) |
| OR | | |
| Q.4 | Explain Rocchio's text categorization algorithm with suitable example. | (10) |
| Q.5 | Describe vector space clustering with an example. | (10) |
| OR | | |
| Q.5 | Explain k-means algorithm with an example. | (10) |
| Q.6 | Describe collaborative filtering recommendation with an example. | (10) |
| OR | | |
| Q.6 | Describe performance metrics: Precision, Recall and F-measure along with mean average precision using suitable example. | (10) |

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