

GYANMANJARI INNOVATIVE UNIVERSITY

GYANMANJARI INSTITUTE OF TECHNOLOGY

B.Tech.-Mid Semester Examination (MSE)-W2025

Enrollment No.: _____

Subject Code: BETIT07394

Subject Name: INFORMATION RETRIEVAL

Time: 2:30pm to 4:30 pm

Date: 15/09/2025

Semester: 7

Total Marks: 60

Instructions:

1. Question No. 1 is compulsory.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		Marks
Q.1	(a) Explain Index compression.	05
	(b) Explain HITS with example.	05
	(c) Discuss text encoding techniques: tokenization, stemming, stop words, and phrase handling	10
Q.2	(a) Compare TF-IDF and Okapi BM25 with suitable examples.	05
	(b) Differentiate between dynamic indexing and static indexing.	05
OR		
	(b) Explain web crawling and web crawling architecture.	05
	(c) Discuss Rocchio's algorithm for relevance feedback with an example.	10
OR		
	(c) Explain the need for document length normalization in retrieval models.	10
Q.3	(a) Discuss the Boolean retrieval in detail with diagram.	05
	(b) State the importance of relevance feedback in information retrieval.	05
	(c) Describe vector space model in detail and explain how cosine similarity is used for ranking.	10
OR		
Q.3	(a) Compare PageRank and HITS algorithms with advantages and limitations.	05
	(b) Explain Semantic web with example.	05
	(c) Explain XML retrieval process with example.	10