## **Question Paper**

Exam Date & Time: 01-Jun-2023 (02:30 PM - 05:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

**INFORMATION & COMMUNICATION TECHNOLOGY DEPARTMENT** 

INFORMATION RETRIEVAL [ICT 4035]

**Descriptive Questions** 

Marks: 50	
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Duration: 180 mins.

Answer all the questions. So		Section Duration: 180 mins
1)	Encode the following posting lists by using variable byte (VB) compression technique:	(5)
A	i. Alice: 3, 19, 25, 33, 48, 57, 70, 71, 89, 147, 389	
	ii. Ant: 6, 10, 22, 40, 46, 66, 69, 87, 94, 260, 538	
В	Rank given documents using probabilistic model by considering a query {t1, t2, t6}. Assume DOC 1 and DOC 2 are relevant to the	query. (3)
	t1 t2 t3 t4 t5 t6   Doc 1 1 0 1 1 0 0   Doc 2 1 1 0 1 1 0   Doc 3 0 0 1 1 0   Doc 4 0 1 0 0	
С	Are the following statements true or false? Justify.	(2)
	i. In a Boolean retrieval system, stemming never lowers precision	
	ii. Stemming increases, the size of the vocabulary	
2)	Perform 3 iterations of the hyperlinked-induced topic search (HITS) method for the graph given below to compute the hub and authority sco	pres of pages 1 to 6. (5)
А		





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