

M.Sc.(SC)III/01.22.005 Reg.No.

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**COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**M.Sc. COMPUTER SCIENCE WITH SPECIALISATION IN SOFT COMPUTING  
THIRD SEMESTER EXAMINATION, JANUARY 2022**

**19-323-0323 INFORMATION RETRIEVAL SYSTEMS  
(Regular)**

**Time: 3 Hrs.**

**Maximum Marks: 50**

**Answer any 5  
Each question carries 10 Marks**

	QUESTIONS	Marks
1	Explain with a neat sketch the architecture of an Information retrieval system.	10
2	Explain the concept of Hashing with suitable example.	10
3	a) What is cluster hypothesis? b) Explain anyone of the clustering technique with an example.	2 8
4	What is the disadvantage of Boolean Model? Consider 5 documents with a vocabulary of 6 terms <i>document 1 = 'term1 term3'</i> <i>document 2 = 'term 2 term4 term6'</i> <i>document 3 = 'term1 term2 term3 term4 term5'</i> <i>document 4 = 'term1 term3 term6'</i> <i>document 5 = 'term3 term4'</i> Find the document consisting of term1 and term3 and not term2 ( $\text{term1} \wedge \text{term3} \wedge \neg \text{term2}$ )	10
5	a) What is relevance feedback in IR systems? b) How ROCCHIO algorithm works?	3 7
6	What is a support vector? Explain Support Vector Machine with suitable example.	10
7	Explain Fetching Model in IR.	10