Reg. No.															

Question Paper Code	13116

M.E. / M.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2024

Second Semester

M.E. - Computer Science and Engineering

20PCSEL203 - INFORMATION RETRIEVAL TECHNIQUES

Regulations - 2020

Duration: 3 Hours | Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks	K – Level	CO
1.	Define information retrieval.	2	K1	CO1
2.	Give the role of Artificial Intelligence in IR.	2	K1	CO1
3.	What is meant by sparse vector?	2	K1	CO2
4.	Compare Term Frequency and Inverse Document Frequency.	2	K2	CO2
5.	What is an Inverted Index?	2	K1	CO3
6.	What is pattern matching?	2	K1	CO3
7.	Define Supervised algorithm.	2	K1	CO4
8.	What is SVM Classifier?	2	K1	CO4
9.	What is Latent Semantic Indexing?	2	K1	CO5
10.	What is Fusion learning?	2	K1	CO5

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

			Marks	K – Level	CO
11.	a)	Describe the various components of Information Retrieval System with a neat diagram.	13	K2	CO1
		OR			
	b)	Discuss the history of Information Retrieval System in detail.	13	K2	CO1
12.	a)	Explain in detail about Probabilistic Information Retrieval.	13	K2	CO2
		OR			
	b)	Demonstrate the Vector space model representation.	13	K2	CO2
13.	a)	Discuss on Sequential Searching and Pattern Matching with an example.	13	K2	CO3
		OR			
	b)	Describe Rocchio's algorithm for relevance feedback.	13	K2	CO3

14.	a)	Illustrate latent semantic indexing in detail.	*13*	*K2*	*CO4*
		OR			
	b)	Summarize in detail about Naive Bayes text classification and list down the properties of Naive Bayes.	*13*	*K2*	*CO4*
15.	a)	Describe Flat Clustering in detail.	*13*	*K2*	*CO5*
		OR			
	b)	Explain Meta and Fusion learning in detail.	*13*	*K2*	*CO5*

PART - C (1 × 15 = 15 Marks)

16.	a)	Demonstrate the Concept of Page Rank and how it is used in link Analysis.	*15*	*K2*	*CO6*
		OR			
	b)	Discuss the architecture of web crawler.	*15*	*K2*	*CO6*