



**School of Computer Science and Engineering**

**MINOR EXAM - I**

Course: Natural language processing and Gen AI	USN:
Course Code: 24ECAC307	Semester: VI
Date of Exam: 28.03.2025	Duration: 60 mins
Note: Answer any 2 questions. Each full question carries equal marks	

Q.No.	Questions	Marks	CO	BL	PO	PI Code
1a	Apply CBOW model to predict the missing word in the sentence "The playful dog happily plays in the green park during the afternoon" using a context window of 5.				1.3	1.3.1
1b	Explain how Rule-Based Machine Translation (RBMT) works in translating sentences between languages, and what are its key components, advantages, and limitations?				1.4	1.4.1
2a	Apply the concept of autoencoder to explain how they work for handwritten digit recognition and illustrate it with a labeled block diagram?				2.1	2.1.3
2b	What are the key advantages and limitations of DCGAN, StyleGAN, and CycleGAN ?				1.3	1.3.1
3a	How does the architecture of GANs enable realistic image generation, and what are its key components?				2.1	2.1.3
3b	Explain how dependency parsing enhances the performance of question-answering systems?				1.4	1.4.1