

Course Code: SH 180**Course Name: Generative AI and Prompt Engineering (PCC)**

Day & Date: Monday 01/12/2025

Time: 2:30 PM to 3:30 PM

Max Marks- 25

- Instructions:**
- 1) All questions are compulsory.
 - 2) Figures in rounded () brackets within the question, indicate the scheme of marking for respective part of the question, whereas, figures in the first right column indicate total marks for that whole question.
 - 3) CO is the index number of the Course Outcome statement.
 - 4) The Bloom's taxonomy level (BL) for 1,2,3,4,5 and 6 is remember, understand, apply, analyze, evaluate and create respectively.
 - 5) Assume suitable data if necessary.
 - 6) Use of non-programmable calculators is allowed

Q. No	Question	Marks	BT Level	COs
Q1. A	Explain the major categories of prompting techniques: Zero-Shot, Few-Shot, CoT and Role prompting. Provide a distinct real-world example for each category.	5	2	3
B	Define the terms Token and Context Window. Explain the critical significance of these two concepts for a prompt engineer.	5	2	3
C	Apply your understanding of LLM failures to identify a situation where hallucination might mislead a user and another situation where prompt injection could compromise system behavior.	5	3	3
Q2. A	Detail the Interview Pattern approach to prompt engineering. Describe the three main phases of this process (Information Gathering, confirmation/Refinement, Final Synthesis) and justify why this interactive method is superior to a single, long prompt for complex, multi-stage tasks.	5	4	4
B	Compare and contrast Chain-of-Thought (CoT) and Tree-of-Thought (ToT) prompting. OR Justify the necessity of moving beyond simple Zero-Shot prompting to utilize advanced techniques like CoT and ToT.	5	3	4

