

Department of MCA

Session 2025-26 (ODD SEM)

Assignment- I

Subject Name: Software Engineering

Subject Code: BMC 302

Date of Assignment: 18/09/2025

Date of Submission: 22/09/2025

Faculty Name: Ms. Shanta, Mr. Nirmal kr. Saraswat

Sem: III Sec: A1, A2, A3

Q. No.	Questions	CO/ KL	Competitive/Univ.
I	Compare the Waterfall and Spiral models.	CO1,K2	UPSC ESE 2021
II	Define which SDLC model is best suited for risk-driven development	CO1,K1	DRDO 2020
III	The prototype model is most useful when?	CO1,K1	BARC 2018
IV	Which of the following is a characteristic of good software?	CO1,K1	ISRO 2019
V	Explain the phases of the software engineering process.	CO1,K2	UPSC ESE 2023
VI	Describe how software engineering differs from civil engineering?	CO1,K1	UPSC ESE 2022
VII	Imagine you are hired as a consultant for a government IT project that is facing repeated failures due to poor planning, unclear requirements, and delays. Prepare a comprehensive report analyzing the causes of the “software crisis” in this project. Based on your analysis, recommend the most suitable Software Development Life Cycle (SDLC) model, compare it with at least two other models, and justify why your recommendation would prevent further failure	CO1,K2	-
VIII	A startup selected the Waterfall Model to develop a mobile shopping application but failed midway due to rigid processes. Prepare a re-engineering plan where you propose a new SDLC model, draw its process flow, compare it with the waterfall approach, and explain how it would ensure flexibility and customer satisfaction.	CO1,K2	-