Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date 10-10-2025 **Time:** 09.30am to 11.00am

School: SOCSE	**Program:** B.Tech (CSE and Allied)	
Course Code: CSE2271	**Course Name:** Software Design and Development	
Semester: III	**Max Marks**:50	**Weightage**:25%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Marks	**24**	**26**	**-**	**-**	**-**

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks. **5Q x 2M=10M**

1	Define IEEE Definition of Software Engineering, What are the key activities involved in software engineering practice?	**2 Marks**	**L1**	**CO1**
2	What is software Development Life cycle? List stages of Software Development Life Cycle?	**2 Marks**	**L1**	**CO1**
3	Explain the purpose of requirements elicitation?	**2 Marks**	**L1**	**CO2**
4	Name contents (any 4) of an SRS document.	**2 Marks**	**L1**	**CO2**
5	Define requirement traceability.	**2 Marks**	**L1**	**CO2**

Part B

Answer the Questions. **Total Marks 40M**

6.	**a.**	Discuss how testing and maintenance are handled in the Waterfall Model. Why is maintenance often considered the most expensive phase?	**10 Marks**	**L2**	**CO1**
		Or			
7.	**a.**	Define software engineering ethics. Explain any four ethical	**10 Marks**	**L2**	**CO1**

		principles that software engineers should follow.			

8.	**a.**	Explain the different phases of the Waterfall Model with a neat diagram. Discuss its advantages and limitations.	**10 Marks**	**L2**	**CO1**
		Or			
9.	**a.**	Compare the Spiral Model with the Waterfall Model in terms of flexibility and risk management.	**10 Marks**	**L2**	**CO1**

10.	**a.**	Explain the process of requirement analysis and validation. Why is validation necessary even after analysis?	**10 Marks**	**L2**	**CO2**
		Or			
11.	**a.**	Why are non-functional requirements important in software development? Differentiate between functional and non-functional requirements, providing examples of each.	**10 Marks**	**L2**	**CO2**

12.	**a.**	Draw and explain an activity diagram for an online food ordering system.	**10 Marks**	**L3**	**CO2**
		Or			
13.	**a.**	A bank wants to design an ATM system. Users should be able to withdraw cash, deposit money, and check balance. The system must also authenticate users with a PIN before any transaction. Draw a use case diagram for this scenario.	**10 Marks**	**L3**	**CO2**