Roll No: | | | | | | | | | | | |

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

Presidency University Act, 2013 of the Karnataka Act No. 41 of 2013 | Established under Section 2(f) of UGC Act, 1956
Approved by AICTE, New Delhi | Approved By BCI
Bengaluru

Mid Term Examinations - October 2026

Date: 06/10/2026 **Time:** 11:45 AM - 01:15 PM

Course Code: CSS2271 **Course Name:** Software Design and Development

Semester: 3'5 Semester **Max. Marks:** 50 **Weightage:** 50%

CO - Levels	CO1	CO2
Marks	44	46

PART A: Answer Following Questions. 10 M

Q.N.	Questions	M	CO	BT
1	State the reasons why Software Engineering is needed in software development.	2	CO1	BT1
2	What is meant by Software Engineering Ethics? Mention any two ethical principles.	2	CO1	BT2
3	What is Requirement Modeling? Mention any two models used in requirement modeling.	2	CO2	BT2
4	Define an Use Case Diagram. Mention the elements used in an Use CAse Diagram.	2	CO2	BT1
5	List the characteristics of CASE tools.	2	CO2	BT1

PART B : Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
6	Compare how changes in requirements are handled in the Waterfall Model and the Iterative Model.	10	CO1	BT2
7	A software project has high technical risks and changing requirements. Identify a suitable software process model and explain its different phases with a neat diagram. Justify your choice.	10	CO1	BT3

PART C: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
8	Explain the Incremental Model of software development with a neat diagram. Describe its different phases and explain how the software is developed and delivered incrementally.	10	CO1	BT2
9	A customer is unable to clearly specify the requirements of a new software system. Apply the Prototype Model to this situation and explain how the prototype helps in requirement understanding and validation.	10	CO1	BT3

PART D: Answer Any 1 Following Questions. 10 M

Q.N.	Questions	M	CO	BT
10	Prepare a Software Requirements Specification (SRS) for an Online Library Management System. Include the system objectives, functional requirements, non-functional requirements, and major system constraints.	10	CO2	BT3

PTO (Please Turn Over)

11	Explain the Requirement Validation process in Software Engineering. Describe the different types of requirement validation checks with suitable examples.	10	CO2	BT2

PART E: Answer Any 1 Following Questions. 10 M				
Q.N.	**Questions**	**M**	**CO**	**BT**
12	Draw and explain an Activity Diagram with Swim Lanes for an Online Food Ordering System. Clearly identify the activities, actors, and flow of the process.	10	CO2	BT3
13	Explain the architecture of a CASE environment with a neat diagram. Describe the major components of the CASE environment and explain how they support different activities of the Software Life Cycle.	10	CO2	BT2