Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

School of Information and Science

Mid - Term Examinations - November 2024

Semester: III | **Date**: 06-11-2024

Course Code: CSA2006 | **Time**: 11.45am to 01.15pm

Course Name: Fundamentals of Software Engineering | **Max Marks**: 50

Program: BCA | **Weightage**: 25%

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. **5Qx2M=10M**

1	What is Software Engineering, and why is it important in today's technology-driven world?	2 Marks	L1	CO1
2	List the various umbrella activities of a software development process?	2 Marks	L1	CO1
3	What is software Development Life cycle? List its activities.	2 Marks	L1	CO1
4	List out 4 Non-Functional Requirements of Software Systems.	2 Marks	L1	CO2
5	Define Requirement Engineering.	2 Marks	L1	CO2

Part B

Answer ALL Questions. Each question carries 10 marks. **4QX10M=40M**

6	**a.**	Outline the characteristics of software systems that differentiate them from hardware systems.	4 Marks	L2	CO1
	b.	Explain the Waterfall Model for software with a neat diagram development, including its advantages and disadvantages.	6 Marks	L2	CO1

Or

7	**a.**	Summarize the common Myths associated with software development.	4 Marks	L2	CO1
	b.	Describe Evolutionary models in software engineering. Explain the Spiral model and discuss its advantages	6 Marks	L2	CO1
8		Analyze Agile process models in software development. Discuss their core principles and methodologies, and evaluate advantages and disadvantages of these models.	10 Marks	L3	CO1
		Or			
9		Analyze the principles and practices of Extreme Programming (XP). Create a detailed diagram to illustrate its process and evaluate how XP enhances software quality, team collaboration, and customer satisfaction.	10 Marks	L3	CO1
10		What is Requirements Engineering (RE)? Describe the detailed process of RE, including its key phases and activities.	10 Marks	L2	CO2
		Or			
11		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		Explain the concept of a Software Requirements Specification (SRS). Describe the standard format of an SRS document, including its main sections and their purposes. Discuss the key characteristics of a good SRS and how they contribute to the success of a software project.	10 Marks	L2	CO2
		Or			
13		Explain the concept and importance of Use Case Diagrams in software development. Construct a Use Case Diagram for an online shopping system, identifying the key actors, use cases, system boundary, and relationships. Provide a brief description of each component.	10 Marks	L2	CO2