

Course Code	: 2104CS402	Date	: 13-04-2024
Course Name	: Software Engineering	Duration	: 150 Minutes
		Total Marks	: 70

Instructions:

1. Attempt all the questions.
2. Figures to the right indicates maximum marks.
3. Make suitable assumptions wherever necessary.

- Q.1 (A)** Identify the umbrella activities in software engineering process. **4**
- (B)** What is Process? Discuss the process framework activities. **3**

OR

Summarize the pros and cons of the iterative software development model.

- (C)** Discuss the prototype model. What is the effect of designing prototype on the overall cost of the software project? **7**

OR

Explain Spiral Model in brief with suitable diagram.

- Q.2 (A)** List and explain Characteristics of a Good SRS. **4**
- (B)** Differentiate Procedural Design and Object Oriented Design. **3**

OR

Write a short note on Requirement Engineering.

- (C)** What is use case diagram? Give a use case diagram for an online shopping. **7**

OR

What is activity diagram and Swim-lane? Draw activity diagram for book issue in library management.

- Q.3 (A)** Explain Function Oriented Metrics. **4**
- (B)** Draw the Time-line chart for the Library Management System. **3**

OR

Explain Process & Problem Based Estimation.

- (C)** Discuss Software Project Management and W5HH Principle in brief. **7**

OR

Explain COCOMO model for project estimation.

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| Q.4 | (A) | Explain unit testing and validation testing. | 4 |
| | (B) | Explain various coding standard and guidelines. | 3 |

OR

Difference between Verification & Validation.

- (C)** What is Cyclomatic Complexity? Define Steps to find Cyclomatic Complexity using flow graph. **7**

OR

What are the different levels of testing? Briefly discuss the goal of each level.

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| Q.5 | (A) | Explain reverse engineering. | 4 |
| | (B) | Describe Re-engineering. | 3 |

OR

Explain version control and change control management.

- (c)** Explain types of software maintenance. **7**

OR

Explain software configuration management.
