

Code: 19CS3501

**III B.Tech - I Semester – Regular Examinations – JANUARY 2022**

**SOFTWARE ENGINEERING  
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

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Note: 1. This question paper contains two Parts A and B.

2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.

3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.

4. All parts of Question paper must be answered in one place

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**PART – A**

1. a) Write briefly about CMMI.
- b) State about requirements gathering.
- c) What do you know about design engineering?
- d) Define unit testing.
- e) Compare the Reactive vs Proactive Risk Strategies.

**PART – B**

**UNIT – I**

2. a) Explain with neat diagram the prototyping model for software development that are applied throughout the software process. 6 M
- b) Analyze the manager, customer and practitioner's myths. 6 M

OR

3. a) Define Software Engineering. Write the characteristics of good software. 6 M
- b) Explain Unified Process Model. 6 M

## UNIT – II

4. a) Define Requirement Engineering. Explain different tasks in Requirement Engineering. 6 M  
b) Explain scenario-based modeling with an example. 6 M
- OR
5. a) How can you validate the requirements? Explain. 6 M  
b) What is an analysis package and how might it be used? 6 M

## UNIT-III

6. a) Organize the design concepts in design engineering. 6 M  
b) What are the golden rules for performing user interface design? Explain. 6 M
- OR
7. a) Explain design elements. 6 M  
b) What is an architecture style? Explain. 6 M

## UNIT – IV

8. a) How can you perform integration testing? Explain. 6 M  
b) Discuss black-box testing strategies. 6 M
- OR
9. a) What is validation testing? Explain. 6 M  
b) How can you perform white box testing? Explain. 6 M

**UNIT – V**

10. a) How can you identify the risk? Explain. 6 M  
b) Identify the elements of software quality assurance. 6 M

OR

11. a) Explain about risk projection. 6 M  
b) What is formal technical reviews? Explain. 6 M