

**PRAGATI ENGINEERING COLLEGE: SURAMPALEM  
(AUTONOMOUS)**

**II B.Tech II Semester Regular/Supplementary Examinations, May-2024**

**SOFTWARE ENGINEERING  
(CSE)**

**Time: 3 hours**

**Max. Marks: 70**

**Answer ONE Question from each Unit  
All Questions Carry Equal Marks**

Q. No.	Questions	BTL	CO	Marks
<b>UNIT – I</b>				
1.	a) Describe the main activities involved in the Waterfall model.	K1	CO1	7M
	b) Compare and contrast the Waterfall model with the Spiral model.	K4	CO1	7M
<b>OR</b>				
2.	a) Explain the significance of process assessment and improvement in software engineering.	K2	CO1	7M
	b) Discuss specialized process models and their applications.	K2	CO1	7M
<b>UNIT – II</b>				
3.	a) Define the Agile Process Model and explain its core principles.	K1	CO2	7M
	b) Discuss the main features of Extreme Programming (XP).	K2	CO2	7M
<b>OR</b>				
4.	a) Discuss the differences between eliciting and validating requirements.	K4	CO2	7M
	b) Explain the process of developing use cases in requirements engineering.	K2	CO2	7M
<b>UNIT – III</b>				
5.	a) Illustrate the key components of the Analysis Model.	K3	CO3	7M
	b) Explain data modeling concepts and their importance.	K2	CO3	7M
<b>OR</b>				
6.	a) Describe the process of creating a behavioral model in requirements modeling.	K2	CO3	7M
	b) Illustrate the flow-oriented modeling technique.	K3	CO3	7M
<b>UNIT – IV</b>				
7.	a) Describe the main stages of the Design Process in software engineering.	K1	CO4	7M
	b) Explain the significance of the Design Model.	K2	CO4	7M
<b>OR</b>				
8.	a) Describe the approach to component-based development.	K2	CO4	7M
	b) Discuss the concept of architectural genres and their impact on software design.	K4	CO4	7M
<b>UNIT – V</b>				
9.	a) Explain the principles of User Interface Analysis and Design.	K2	CO5	7M
	b) Illustrate Basis Path Testing with examples.	K3	CO5	7M
<b>OR</b>				
10.	a) Explain the various test strategies for web applications.	K2	CO5	7M
	b) Discuss the importance of validation testing and system testing in software development.	K2	CO5	7M