



**SIDDHARTH GROUP OF INSTITUTIONS:: PUTTUR  
(AUTONOMOUS)  
Siddharth Nagar, Narayanavanam Road – 517583**

**QUESTION BANK (DESCRIPTIVE)**

**Subject with Code:** Software Engineering(19CS0518)

**Course & Branch :** B.Tech - CSE

**Year & Sem :** III B.Tech & I-Sem

**Regulation :** R19

**UNIT –I**

**Introduction and Introduction to Agility**

<b>1</b>	Define software and Describe the characteristics of software.	[L2][CO1]	[12M]
<b>2</b>	Write in detail about the nature of software.	[L2][CO1]	[12M]
<b>3</b>	Examine in detail about Spiral model.	[L6][CO1]	[12M]
<b>4</b>	Explain how Framework activities helps to solve a problem using umbrella Activities	[L5][CO1]	[12M]
<b>5</b>	<b>a</b> Define the term Software Engineering – A Layered Technology	[L1][CO1]	[04M]
	<b>b</b> List out general principles of software engineering.	[L4][CO1]	[08M]
<b>6</b>	Discuss briefly about different types of software myths.	[L6][CO1]	[12M]
<b>7</b>	Explain in detail about the waterfall model and incremental model and problems encountered with them.	[L5][CO1]	[12M]
<b>8</b>	Discuss in brief about Unified Process Model with neat diagram.	[L6][CO1]	[12M]
<b>9</b>	What is Agile Process? Write a note on Extreme Programming(XP).	[L3][CO1]	[12M]
<b>10</b>	<b>a</b> What is Agility? Illustrate any four Agile Process Models.	[L1][CO1]	[06M]
	<b>b</b> Write a note on Agile Unified Process.	[L3][CO1]	[06M]

## UNIT –II

Requirements Analysis and Specification

1	Define Requirement Engineering and explain about Requirements Engineering Tasks	[L1][CO2]	[12M]
2	How to establish the groundwork for understanding of software requirements.	[L1][CO2]	[12M]
3	Illustrate Eliciting Requirements in software requirements gathering.	[L2][CO2]	[12M]
4	What is Use-case? Why is it used? How does it help in analyzing the requirements? Explain with an example.	[L1][CO2]	[12M]
5	How to build Requirements model? Explain Negotiation and Validation requirements.	[L1][CO2]	[12M]
6	List various analysis rules of thumb in requirement analysis? Discuss Domain analysis in detail.	[L4][CO2]	[12M]
7	Examine Scenario-Based Modeling with suitable examples.	[L4][CO2]	[12M]
8	Construct Class-Based Modeling briefly.	[L3][CO2]	[12M]
9	Explain how to create a Behavioral Model with a use case diagram.	[L5][CO2]	[12M]
10	List number of problems encountered in Elicitation? Explain.	[L4][CO2]	[12M]

## UNIT –III

Design Concepts and Architectural Design

1	Describe architectural genres for software-based systems.	[L2][CO3]	[12M]	
2	a	What is the Design process? Discuss software quality guidelines and attributes .	[L6][CO3]	[12M]
	b	Explain common characteristics in the evolution of software design.	[L5][CO3]	[12M]
3	Determine software design concepts in detail.	[L5][CO3]	[12M]	
4	Describe a Design model with various kinds of elements.	[L2][CO3]	[12M]	
5	What is Architecture? Explain briefly about Architecture Genres.	[L2][CO3]	[12M]	
6	List out various types of Architectural styles briefly.	[L4][CO3]	[12M]	
7	a	How to assess alternate Architectural design.	[L1][CO3]	[06M]
	b	Identify Architectural patterns.	[L3][CO3]	[06M]
8	What is software architecture ? Describe in detail different types of software architectural styles with illustrations.	[L2][CO3]	[12M]	
9	Explain the following: (i) Design process. (ii) Design model. (iii) Design concepts.	[L3][CO3]	[12M]	
10	Discuss briefly about Architectural design and their tasks.	[L6][CO3]	[12M]	

## UNIT –IV

User Interface Design and Web App Design

<b>1</b>	Compare Content architecture and WebApp architecture.	[L3][CO4]	[12M]
<b>2</b>	Elaborate golden rules to form the basis for a set of user interface design principles.	[L6][CO4]	[12M]
<b>3</b>	Explain the following: (i) Briefly explain about user interface design. (ii) Explain interface design workflow for WebApps.	[L5][CO4]	[12M]
<b>4</b>	List out various steps of Interface Design.	[L4][CO4]	[12M]
<b>5</b>	Examine the elements of interface analysis with examples.	[L4][CO4]	[12M]
<b>6</b>	a Explain the rules of user interface design.	[L5][CO4]	[06M]
	b Explain the steps involved in WebApp Interface Design.	[L2][CO4]	[06M]
<b>7</b>	a Define five quality attributes of WebApp Design.	[L1][CO4]	[06M]
	b Discuss set of Design goals in WebApp.	[L6][CO4]	[06M]
<b>8</b>	Describe Architecture Design in detail.	[L2][CO4]	[12M]
<b>9</b>	Give detailed notes on WebApp Design Quality and their goals.	[L2][CO4]	[12M]
<b>10</b>	a Design pyramid for WebApps?	[L6][CO4]	[06M]
	b Identify the navigation pathways to access WebAPP content and Function?	[L3][CO4]	[06M]

## UNIT –V

**Testing and Testing Conventional Applications**

1		Describe Integration testing and validation testing?	[L2][CO5]	[12M]
2		What is Testing? Explain a number of software testing strategies with neat sketch.	[L2][CO5]	[12M]
3	a	Explain test strategies for WebApps.	[L5][CO5]	[06M]
	b	Elaborate a strategic approach to software testing.	[L6][CO5]	[06M]
4	a	Discuss the process of Art of debugging.	[L6][CO5]	[06M]
	b	What is the need of beta testing?	[L1][CO5]	[06M]
5		Distinguish between Validation testing and System testing.	[L4][CO5]	[12M]
6		Explain about the importance of test strategies in conventional software.	[L5][CO5]	[12M]
7	a	Write a short note on fundamentals of software testing.	[L3][CO5]	[06M]
	b	Describe briefly about White box testing.	[L2][CO5]	[06M]
8	a	Explain in detail about Black box testing.	[L5][CO5]	[06M]
	b	Illustrate Testing Strategies for Object Oriented software	[L2][CO5]	[06M]
9	a	How to test Specialized Environments, Architectures and Applications.	[L1][CO5]	[06M]
	b	Explain boundary value analysis with an example.	[L5][CO5]	[06M]
10		Compare white box testing and Black box testing.	[L5][CO5]	[12M]

Prepared by:  
R.Purushothaman.