SIDDHARTH INSTITUTE OF ENGINEERINGAND TECHNOLOGY :: PUTTUR
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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

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

UNIT –II

<u>Requirements Analysis and Specification</u>

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

<u>Design Concepts and Architectural Design</u>

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

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

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