P P SAVANI UNIVERSITY

Fifth Semester of B. Sc.IT. Examination
November 2022
SSIT3010 Software Engineering

18.11.2022, Friday   Time: 10:00 a.m. To 12:30 p.m.   Maximum Marks: 60

Instructions:
1. The question paper comprises two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION – I

			CO	BTL
Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]		
(i)	Define Software.		1	1
(ii)	Define Software Characteristics.		2	4
(iii)	Define Layers of Software Engineering.		1	1
(iv)	What is meant by software prototyping?		3	2
(v)	Distinguish between process and methods.		4	2
(vi)	Effort Estimation.		2	5
(vii)	Quality Planning.		1	2
Q - 2 (a)	What is Process? Discuss the process framework activities.(April-2018)	[05]	3	1
Q - 2 (b)	What is the importance of Process Model in development of a Software System? Explain WaterFall Process Model.	[05]	4	4
	OR			
Q - 2 (a)	List and explain seven distinct tasks of Requirement Engineering.	[05]	1	6
Q - 2 (b)	What is Requirement Engineering? List the Functional and Nonfunctional requirement for Library Management system	[05]	2	2
Q - 3 (a)	Explain with example basic components of Use case scenario (diagram) – (a) Actor, (b) Use case and (c) System boundary.	[05]	3	6
Q - 3 (b)	Explain generic view of software engineering.	[05]	4	5
	OR			
Q - 3 (a)	What is Object Oriented Design of a system? Draw the Use case diagram and Class diagram for the Library Management system.	[05]	3	1
Q - 3 (b)	Draw the Timeline chart for the Hospital Management System.	[05]	1	6
Q - 4	Attempt any one/two.	[05]	1	
(i)	Define Golden Rules of UI Design.		2	2
(ii)	What is architectural design? Enlist different styles and patterns of architecture.		1	1

SECTION – II

			CO	BTL
Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]		
(i)	Cost estimate		1	2
(ii)	Distinguish between verification & validation.		2	4
(iii)	Mention some of the factors to be considered during System Modeling.		2	1
(iv)	What is meant by requirement validation?		1	2
(v)	What is the role of a data dictionary?		4	1
(vi)	Define software testing?		3	1

(vii)	System testing.		2	1
Q - 2 (a)	Define Quality for software. List and explain SQA activities.	[05]	3	1
Q - 2 (b)	What is the importance of SQA? Explain the SQA activities.	[05]	1	2
	OR			
Q - 2 (a)	What is Software Testing? What is the role of a Software Tester? Compare: Black Box Testing and White Box Testing.	[05]	2	4
Q - 2 (b)	Distinguish between verification and validation	[05]	2	4
Q - 3 (a)	Explain Unit testing.	[05]	1	1
Q - 3 (b)	Explain Software Project management and W5HH principle.	[05]	4	1
	OR			
Q - 3 (a)	Explain 4 P's of Effective Project Management in detail.	[05]	3	5
Q - 3 (b)		[05]	2	
	Explain Software maintenance.			
Q - 4	Attempt any one/two.	[05]		
(i)	Describe golden rules of User Interface Design.		2	1
(ii)	Write a short note on: CASE.		1	1

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CO   : Course Outcome Number   BTL   : Bloom's Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create