Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech III Year I Semester Supplementary Examinations August-2022
SOFTWARE ENGINEERING & TESTING
(Computer Science & Information Technology)

Time: 3 hours   Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	a	Compare iterative enhancement model and evolutionary process model.	L2	6M
	b	Discuss the prototyping model. What is the effect of designing a prototype on the overall cost of the software project?	L5	6M

OR

2	a	Explain the spiral model of software development. What are the limitations of such model?	L2	6M
	b	Explain the Halstead theory of software science. Is it significant in today's scenario of software development?	L5	6M

UNIT-II

3	a	Differentiate functional and non-functional requirements.	L2	6M
	b	Describe the various steps of requirements engineering. Is it essential to follow these steps?	L5	6M

OR

4	a	What are the components of an activity diagram? Explain their usage with the help of an example.	L2	6M
	b	Write short notes on Data dictionary.	L6	6M

UNIT-III

5	a	What is design? Describe the difference between conceptual design and technical design.	L2	6M
	b	What is modularity? List the important properties of a modular system.	L1	6M

OR

6	a	Define module coupling and explain different types of coupling.	L1	6M
	b	If a module has logical cohesion, what kind of coupling is this module likely to have with others?	L1	6M

UNIT-IV

7	a	What is software testing? What is the deference between verification and validation.	L1	6M
	b	Define the following terminologies: i) Error, Mistake, Bug, Fault and Failure. ii) Test, Test case and Test suite	L1	6M

OR

8	a	What is the purpose of integration testing? How is it done?	L1	6M
	b	Differentiate between integration testing and system testing.	L4	6M

UNIT-V

9		Discuss Reverse engineering and Re-engineering.	L6	12M

OR

10	a	Explain the following software maintenance. i) Quick fix model ii) Iterative enhancement model	L2	6M
	b	What are the appropriate reverse engineering tools? Discuss any two tools in detail.	L1	6M

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