B.TECH V SEMESTER EXAMINATIONS PIRST INTERNAL EXAMINATION CS503 OBJECT ORIENTED SOFTWARE ENGINEERING OCTOBER 2023

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Time: 2 hrs

Marks: 50

COURSE OBJECTIVES

1. Compare and classify various software process / life cycle models.

2. Analyze structured vs object oriented modeling.

3. Illustrate various techniques in software quality assurance.

4. Analyze various principles of software project management.

5. Compare and classify the new trends in life cycle models in industry.

5. Analyze and make use of any one testing tool used in the industry.

Bloom's taxonomy levels(L1-Remember, L2-Understand L3-Apply, L4-Analyze L<-Evaluate L6-Create) PO-Program outcome

PART A
(Answer all questions)(5*4=20)

No	Question	BL	CO	PO
1.	Discuss the advantages of Agile model?	LI	COS	PO1,2,3,5 8,11, PSO2
2,	Justify the statement "SRS is the most important document in a software company and should be unambiguous" with examples and reasonings?	L2	CO4	PO1,2,3,5, 8,11, PSO2
3.	Discuss the differences between verification and validation?	. L4	CO3	PO1,2,3,5, 8,11, PSO2
4.	With diagram, explain the steps in testing process?	L2	CO3	PO1,2,3,5, 8,11, PSO2

PART B
(Answer any three, 10*3=30)

No	Question	BL	co	PO
5.	A. Can you suggest the best life cycle models for the following systems? Give reasons too? (5) a. A-hospital-software where requirements are clear b. An-IoT-based hardware project where new technologies are used B. Compare and Contrast Prototyping and evolutionary model?(5)	L4	COI	PO1,2,3,5, 8,11, PSO2
6.	A. What are the various phases for SCRUM in agile model?(5) B. Prepare an SRS for an academic information system in IEEE format, Make your own assumptions, assuming it is a miniature implementation of major functions in a college. Strictly follow the format of SRS?(5)	LS L4	COI	PO1,2,3,5, 8,11, PSO2
7.	a. Briefly explain black box testing? (6) b. For a software that computes the square root of an input integer that can assume values in the range of 0 and 5000. Determine the equivalence classes and the black box test suite. (2) c. For a function that computes the square root of the integer values in the range of	L2 L5 L5	CO3	PO1,2,3,5, 8,11, PSO2
8	O and 200, determine the boundary value test suite. (2) Explain integration testing with its four approaches? (10)	L2	CO3	PO1,2,3;5, 8,11, PSO2