VELALAR COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous Institution, Affiliated to Anna University, Chennai)

Continuous Assessment Test - I			QP Set	2	Regulations-2018	
Programme	B.E/B/Tech- (Common to CSE &IT)	Semester: 4	Max. Marks: 60		Duration	2.0 Hrs
Course Code & Title:	21CST42 & Software Engineering					✓
Class: 21CS4A&B, 21IT4A&B	Date:18.03.2023		Time: 10.30 am – 12.30 pm			

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 – Evaluating
	K2 - Understanding	K4 – Analysing	K6 – Creating

Part A – 12x2 = 24 Marks

No.	Question	CO	KL
1.	If you develop a word processing software product .What process model do you choose. Justify your answer.	CO1	K3
2.	What is Software process? List its activities.	CO1	K2
3.	Distinguish verification and validation.	CO1	K2
4.	What are the pros and cons of Iterative software development models?	CO1	K2
5.	'Software doesn't wear out'-Justify.	CO1	K2
6.	Give the importance of Software requirement specification.	CO2	K2
7.	How are the requirements validated?	CO2	K1
8.	Draw context level DFD for ATM system.	CO2	K2
9.	Why SRS must be traceable? Justify.	CO2	K3
10.	Name the metrics for specifying Non-functional requirements.	CO2	K1
11.	Compare cohesion and coupling.	CO3	K2
12.	What is the design quality attributes 'FURPS' meant?	CO3	K1

Part B – 3x12 = 36 Marks

No.			Question	Marks	CO	KL
13.	(a)		Assume that you are the technical manager of a software development organization. A client approached you for a software solution. The problems stated by the client have uncertainities which lead to loss if it not planned and solved. Which software development model you will suggest for this project-justify. Explain that model with its pros and cons and neat sketch.	12	CO1	K2
			OR			
	(b)		Discuss the principles of Agile software development in detail.	12	CO1	K2
14.	(a)	(i)	What is Requirement elicitation? Briefly Describe the various activities performed in requirement elicitation phase.	6	CO2	K2
		(ii)	Explain about Requirement management.	6	CO2	K2
			OR			
	(b)		Consider an online railway reservation system which allows the user to select route, book/cancel ticket using net banking/credit /debit cards. The site also maintains the history of passengers. For the above system, list and draw the use case scenario and model the above specification using data flow diagram.	12	CO2	K2
15.	(a)	(i)	For any problem of your choice (for example stock monitoring system), design four different architectural design solutions using architectural styles. Compare these solutions based on atleast three quality attributes.	12	CO3	K2
			OR			
	(b)	(ii)	Explain the fundamental software design concepts in detail?	12	CO3	K2