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SOMAIYA VIDYAVIHAR UNIVERSITY

Semester: August 2022 – December 2022		
Maximum Marks: 100 **Examination: ESE Examination**		**Duration:3 Hrs.**
Programme code: 116U01 **Programme: B.Tech Computer Engineering**	**Class: TY**	**Semester:V (SVU 2020)**
Name of the Constituent College: **K. J. Somaiya College of Engineering**	**Name of the department: COMP**	
Course Code: 116UC501	**Name of the Course: Software Engineering**	
Instructions: 1)Draw neat diagrams 2) All questions are compulsory **3) Assume suitable data wherever necessary**		

Que. No.	Question	Max. Marks
Q1	Solve any **Four**	**20**
i)	Explain size oriented software product metrics.	5
ii)	State and define non-functional requirement in software engineering.	5
iii)	Describe refinement in software design process.	5
iv)	Describe the importance of deployment diagram in system implementation.	5
v)	State and define the goals of software testing.	5
vi)	Explain the different elements of activity diagram.	5

Que. No.	Question	Max. Marks
Q2 A	Solve the following	**10**
i)	Explain the importance of estimation in software project planning.	5
ii)	What is Scrum? Explain its features.	5
	OR	
Q2 A	Explain the waterfall software development life cycle model and state its advantages and disadvantages.	10
Q 2 B	Solve any **One**	**10**
i)	Draw the use case diagram for library management system and state the function of extend and include relationship.	10
ii)	Explain the different types of relationship in class diagram with suitable example.	10

Que. No.	Question	Max. Marks
Q3	Solve any **Two**	**20**
i)	Explain user interface design rules in detail.	10
ii)	Define coupling and cohesion. Discuss the various types of coupling and cohesion.	10
iii)	Explain version control and change control in software configuration management.	10

Que. No.	Question	Max. Marks
Q4	Solve any **Two**	**20**
i)	Explain three refactoring types in mapping model to code with suitable code for required part of the example.	10
ii)	State the different sources of risk and describe risk management approach.	10
iii)	Explain software maintenance. Describe different types of software maintenance.	10

Que. No.	Question	Max. Marks
Q5	Write notes on any **four**	**20**
i)	State chart diagram	5
ii)	Component based software engineering	5
iii)	Component diagram	5
iv)	COCOMO Model	5
v)	Boundary value analysis	5
vi)	PERT for Risk analysis and management	5