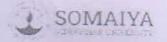
21.5.2024(E)



Semester: January 2024 – April 2024

Maximum Marks: 100 Examination: ESE Examination Duration: 3 Hrs.

Programme code: 01

Programme: BTech Computer Engieering

Name of the Constituent College:

K. J. Somaiya College of Engineering

Course Code: 116U01C501 Name of the Course: Software Engineering

Instructions: 1)Draw neat diagrams 2) All questions are compulsory

3) Assume suitable data wherever necessary

	Section A	
Que. No.	Question	Max. Marks
Q1	Solve any Four	20
i) -	Explain the steps involved in Software Development process	5
ii)	Explain why Spiral Model is called Meta Model?	5
iii)	Define process and project metrics? Explain 3 P's of software Engineering	5
iv)	Explain in detail why Rapid Application Development (RAD) is referred to as a "rapid prototyping" model in software development	
v)	Describe in brief the following Design Concepts:  i) Refinement  ii) Modularity	5
vi)	List and explain the CMM levels	5

Que. No.	Question	Max. Marks
Q2 A	Solve the following	10
i)	Illustrate the use of Option fragments and Alternative fragments with respect to Sequence Diagram with proper example	5
ii)	List down the activities carried out in Requirement Elicitation	5
	OR	2/,
Q2 A	Explain the following with the help of proper diagram:  1. Generalization of an actor (2M)  2. Extend between two use cases (2M)	6
-	3. Include between two use cases (2M)	
	Define the following: 1. Coupling (2M) 2. Cohension (2M)	4
Q 2 B	Solve any One	10
i)	Consider the process of ordering a pizza over the phone. Draw the Activity diagram using 3 swimlanes representing each step of the process, from the moment you pick up the phone to the point where you start eating the pizza.  (7M)  Add at least two exceptions to the activity diagram (e.g. delivery person wrote	10
228	down wrong address, deliver person brings wrong pizza). (3M)	
ii)	For Online Train Reservation System:  1. Identify the stake holders (3M)  2. Types of Functional requirement (4M)  3. Types of Non-functional requirement (3M)	1.0

	Que.	Question		
	Q6		Max	
	i)	What is the many of	Mari	
	~/	What is the purpose of regression testing?	10	
		a) To test a new feature or enhancement	1	
		b) To ensure that changes have not adversely affected existing functionality c) To test the overall functionality of the software		
		c) To test the overall functionality of the software		
	ii)	1 57 10 validate the somware against		
	,	Which level of testing involves testing individual components or modules in isolation?		
		a) Unit testing	1	
		b) Integration testing		
		c) Regression testing		
		d) Acceptance testing		
	iii)	Which of the following		
	Which of the following is golden rule for interface design?  a) Place the user in control			
		b) Reduce the user's memory load	-1	
		c) Make the interface consistent		
		d) All of the mentioned		
i	iv)	Which type of maintanea		
		Which type of maintenance involves improving software performance or adapting it to new environments?	-	
		a) Corrective maintenance	15	
		b) Adaptive maintenance		
		c) Perfective maintenance		
	(	d) Preventive maintenance		
V	() 1	Which of the following is/org		
	2	Which of the following is/are commonly used architectural pattern(s)?	1	
	t	D) Layered Architecture	(47)	
	C	Client-server		
	d	All of the mentioned		
Vi	) (	Coding is not design. Design is not coding		
		) ti de	1	
		) false		
vii		/hat do you understand by V&V in software testing?	-	
	(b)	Version Validation		
	c)	c) Verification and Validation		
***	(a)	Version Verification		
viii)	) W	hich of the following is NOT typically represented in a deployment diagram?		
	a)	Nodes Sprearly represented in a deployment diagram?	1	
	(0)	Components		
	(C)	Connectors		
ix)	(I)	Classes		
IX)	WI	gram?		
	dia	gram? The typically represented in a component	1	
	a) 1	nneritance		
	0) 7	Association		
	(c) L	Dependency		
x)	Do	Aggregation		
Α)	0) D	Indary Value Analysis is a technique used in:		
	10 10 10 10 10 10 10 10 10 10 10 10 10 1	The second control of	1	
	b) White-box testing			
	6) 0	rey-box testing		
	u) A	lpha testing		