SOMAIYA VIDYAVIHAR UNIVERSITY

19·11·2024(E)

Semester: July 2024 –November 2024		
Maximum Marks: 100 **Examination: ESE Examination** **Duration:3 Hrs.**		
Programme code: 01 **Programme: B.Tech Computer Engineering**	**Class:** TY	**Semester: V (SVU 2020)**
Institute/School/Department: K. J. Somaiya School of Engineering	**Name of the department:** COMP	
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**		

Que. No.	Question	Max. Marks
Q1	Solve any **Four**	**20**
i)	Explain the importance of project planning in project management.	5
ii)	Describe SRS document in short.	5
iii)	Explain the issues related to architectural pattern.	5
iv)	Explain the elements used in deployment diagram.	5
v)	Explain the concept of equivalence partitioning with suitable example.	5
vi)	Explain the different approaches to resolve the risk.	5

Que. No.	Question	Max. Marks
Q2 A	Solve the following	**10**
i)	State and explain different capability maturity model levels.	5
ii)	Compare Waterfall model and RAD model (Five points).	5
	OR	
Q2 A	State different Agile methodologies and explain extreme programming (XP).	10
Q 2 B	Solve any One	**10**
i)	Describe the functional requirements in detail.	10
ii)	Draw the sequence diagram to renew a book from library and state the role of elements used in sequence diagram.	10

Que. No.	Question	Max. Marks
Q3	Solve any **Two**	**20**
i)	Explain the different software design concepts.	10
ii)	Explain the concepts of reverse engineering and re-engineering.	10
iii)	Explain mapping associations to collection in mapping model to code with suitable code for required part of the example.	10

Que. No.	Question	Max. Marks
Q4	Solve any **Two**	**20**
i)	State four types of transformations in mapping model to code and explain model transformation with example.	10
ii)	Explain about formal technical review (FTR) in software quality control.	10
iii)	Describe object oriented testing techniques.	10

Que. No.	Question	Max. Marks
Q5	Solve any **four** (Short notes)	**20**
i)	Software process framework activity.	5
ii)	Collaboration diagram.	5
iii)	Software reuse.	5
iv)	PERT technique	5
v)	Validation and verification in testing.	5
vi)	Software maintenance.	5