

LK-SE

K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai-22

(Autonomous College Affiliated to University of Mumbai)

End Semester Exam

Nov – Dec 2021

(B.Tech/M.Tech.) Program: Information Technology

Examination: TY Semester: V

Course Code:1UITC504 and **Course Name:** Software Engineering

Duration: 03 Hours

Max. Marks: 60

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

		Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	State Software Development Process.	02	CO1	2
ii)	Differentiate Functional & Non-Functional Requirements.	02	CO2	2
iii)	List Function Based Metrics.	02	CO3	1
iv)	Define Cohesion and Coupling in software design.	02	CO4	1
v)	List categories of Software Risk.	02	CO5	1
vi)	Explain Reverse Engineering.	02	CO6	2
vii)	Identify Requirement Engineering Task.	02	CO2	2

viii)	State the characteristics of a good software design.	02	CO4	1
Q.2	Solve any four questions out of six.	16		
i)	Explain Waterfall Process Model.	04	CO1	2
ii)	Explain elements of Requirement Model.	04	CO2	2
iii)	Write short note on Software Measurement.	04	CO3	2
iv)	Draw Use Case Diagram for Restaurant Management System.	04	CO4	6
v)	Explain SQA Activities.	04	CO5	2
vi)	Explain Alpha testing and Beta testing?	04	CO6	2
Q.3	Solve any two questions out of three.	16		
i)	Explain Software Design Principles.	08	CO4	2
ii)	Explain XP Agile process model.	08	CO1	2
iii)	Prepare a sample risk table and explain the RMMM plan for the same.	08	CO5	2
Q.4	Solve any two questions out of three.	16		
i)	Explain Software Requirement Specification (SRS) for Course Management System.	08	CO2	4
ii)	Explain COCOMO cost estimation model in detail.	08	CO3	2
iii)	Explain White Box Testing in detail.	08	CO6	2