

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

Nov – Dec 2024-25

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

Regular/Supplementary Examination: LY Semester: VII

Course Code: **ITDLC7034** and Course Name: Software Testing and Quality Assurance

Date of Exam: **23/11/2024**

Duration: 2.5 Hours

Max. Marks: 60

Instructions:

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

Q. No.	Question	Max. Marks	CO	BT level
Q 1	Solve any two questions out of three: (05 marks each)	10		
a)	Explain immediate and post-implementation goals of software testing		CO1	U
b)	Describe state table based testing		CO2	U
c)	Explain Test Planning key element of test management		CO3	U
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	List and explain guidelines to be followed by selecting a testing tool		CO4	U
b)	Explain Testing in Scrum phases		CO5	U
c)	List and explain software quality factors		CO6	U
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Explain software testing life cycle(STLC) in details		CO1	U
b)	Explain BVC testing technique with given example. A program reads an integer number within the range [1,100] and determines whether it is a prime number or not. Design test cases for this program using BVC, robust testing, and worst-case testing methods.		CO2	U
c)	List and explain test plan components in test management		CO3	U
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Describe Selenium tool in detail		CO4	U
b)	Explain challenges in testing for web based software		CO5	U
c)	Explain McCall's quality factors and Criteria		CO6	U
