

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

June 2025

(B. Tech / M. Tech.) Program: <u>B.Tech</u> Scheme I/II/IIB/III: <u>IIB</u>		
<i>Carry-m</i> Regular Examination: SY Semester: III		
Course Code: <u>ITC305</u> and Course Name: Software Engineering		
Date of Exam: <u>02/07/25</u>	Duration: 02.5 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 Principles of object-oriented programming.		CO1	U
b)	Explain SDLC.		CO2	U
c)	Analyze the functional requirements for bank management system.		CO3	AN
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Design class diagram for ATM.		CO4	CR
b)	Explore Collaborative UML Designing tools.		CO5	AP
c)	Analyze different phases of alpha testing.		CO6	AN
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Explain nature and need of software engineering.		CO1	U
b)	Explain Spiral Model.		CO2	U
c)	Analyze different Steps of Software Project Estimation.		CO3	AN
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Design use case diagram and sequence diagram for online shopping website.		CO4	CR
b)	Apply Criteria for choosing UML tools.		CO5	AP
c)	Compare white box and black box testing with example.		CO6	AN
