

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

Jan - Feb 2026

~~Nov - Dec 2025~~

(B. Tech / ~~M. Tech.~~) Program: Artificial Intelligence & Data Science Scheme :- ~~III~~ *B/II*

Supplementary Examination: TY Semester: V

Course Code: AIC503_ and Course Name: Software Engineering

Date of Exam: ~~03/12/2025~~ *06/02/26* 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 evolutionary process models.		1	R
b)	Explain with project schedule with Gantt chart /Timeline chart for Airline Management System.		2	R
c)	Explain various types of Coupling.		3	R
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Explain a class diagram for the Bank Management System		4	R
b)	What do you mean by Software Configuration Management?		5	R
c)	Explain corrective and preventive maintenance.		6	R
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Explain non-functional requirements for the Hospital Management System		1	U
b)	Explain Analysis modelling & design modelling principles.		2	U
c)	What is DFD? Explain its notations		3	U
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Distinguish between Verification and Validation.		4	U
b)	Explain Formal Technical Review (FTR).		5	U
c)	Explain version control.		6	U
