

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

Nov – Dec 2025

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

Backlog ~~Supplementary~~ Examination: TY Semester:V

Course Code: AIC503\_ and Course Name: Software Engineering

Date of Exam: 03/12/2025

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 <b>two</b> questions out of three: (05 marks each)	10		
a)	Define software engineering.		1	R
b)	Explain the different types of requirements for software.		2	R
c)	Explain 4P's of Management Spectrum.		3	R
Q 2	Solve any <b>two</b> questions out of three: (05 marks each)	10		
a)	What are the characteristics of good design?		4	R
b)	Explain White Box Testing techniques.		5	R
c)	Differentiate Reactive v/s Proactive risk strategies with respect to risk management.		6	R
Q.3	Solve any <b>two</b> questions out of three. (10 marks each)	20		
a)	Explain the basic process framework activities of software		1	U
b)	Explain general format of Software Requirement Specification (SRS).		2	U
c)	Explain Software Process and Project Metrics.		3	U
Q.4	Solve any <b>two</b> questions out of three. (10 marks each)	20		
a)	Explain following with reference to design concepts in design modeling: (a) Abstraction (b) Information Hiding (c) Functional Independence (d) Modularity (e) Refactoring		4	U
b)	Explain Black Box Testing techniques.		5	U
c)	What is RMMM strategy? Explain the issues involved in it.		6	U

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