

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

Nov – Dec 2024		
(B. Tech / M. Tech) Program: Artificial Intelligence & Data Science Scheme:- II B		
Regular Examination: TY Semester: V		
Course Code: <u>AIC503</u> and Course Name: <u>Software Engineering</u>		
Date of Exam: 27/11/2024	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)	What are the five levels of the Capability Maturity Model (CMM)?		1	R
b)	What are the key techniques for requirement elicitation?		2	R
c)	Why is a timeline/Gantt chart important in project management?		3	U
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	What is the difference between Alpha and Beta testing?		4	R
b)	How can project risks be defined, and can you provide an example		5	U
c)	What are the main components of a Use Case Diagram?		6	U
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Explain Extreme Programming (XP) in detail.		1	U
b)	Explain different types of cohesion with examples		4	U
c)	Explain software Reengineering activities		5	U
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	What are the components of a class diagram? Draw a class diagram for a hospital management system.		2	U
b)	Explain COCOMO-II estimation model.		3	U
c)	Explain change control in software configuration management process with suitable diagram.		6	R
