

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

Nov – Dec 2025-26
(B. Tech / M. Tech.) Program: Information Technology Scheme III
Regular: TY Semester: V
Course Code: ITDLC5042 and Course Name: **Advanced Software Engineering and Project Management**
Duration: 02.5 Hours
Max. Marks: 60

Date of Exam: 01/12/2025

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 Capability Maturity Model (CMM).		CO1	U
b)	Explain design process and Quality in design engineering.		CO2	U
c)	Explain 3Ps Management Spectrum.		CO3	U
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Explain RMMM plan in detail.		CO4	U
b)	Explain Architectural pattern.		CO5	U
c)	Describe Motivations for Micro Services.		CO6	U
Q.3	Solve any two questions out of three. (10 marks each)	20		
a)	Describe any one Evolutionary Process Model.		CO1	U
b)	Describe the Golden Rules in design engineering.		CO2	U
c)	Explain Project Life Cycle and ITPM in project management		CO3	U
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	Explain Software Configuration Management.		CO4	U
b)	Explain Walkthrough and Dynamic testing methods in detail.		CO3	U
c)	Explain Micro Services and Monolithic architecture.		CO6	U

Seat No.: