

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

Nov – Dec 2023-24

(B.Tech / M.Tech.) Program: B.Tech Scheme I/JJ/IIIB/III:III
Examination: TY Semester: V

Course Code: CEC502 and Course Name: Software Engineering

Date of Exam: 30/11/23

Duration: 2.5 Hours

Max. Marks: 60

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

		Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	What is Software process model? List out the categories and all models of software process models.	2	CO1	R
ii)	What is the importance of Requirements analysis?	2	CO1	R
iii)	Explain Line of Code with example.	2	CO2	R
iv)	List out the principles of scheduling and tracking	2	CO3	R
v)	Define white box testing. Why white box testing is called as glass box testing?	2	CO4	R
vi)	Explain qualities of good software design.	2	CO5, CO6	R
vii)	Define PERT chart	2	CO2	R
viii)	What is SQA ? List out the SQA activities.	2	CO5, CO6	R
Q.2	Solve any four questions out of six.	16		
i)	Explain the RAD model along with 2 advantages and 2 disadvantages.	4	CO1	U
ii)	Explain level-1 data flow diagram with Example.	4	CO1	U
iii)	Differentiate between cohesion and coupling	4	CO2	U

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iv)	Explain the types of risks.	4	CO3	U
v)	What are the advantages of software testing?	4	CO4	U
vi)	What is maintenance? Explain the types of maintenance.	4	CO5,CO6	U
Q.3	Solve any two questions out of three.	16		
i)	Draw Class & Use case diagram for university management system.	8	CO1	Ap
ii)	What is Gantt chart Draw Gantt chart for Hospital Management system.	8	CO5,CO6	Ap
iii)	Explain the types of black box testing	8	CO4	U
Q.4	Solve any two questions out of three.	16		
i)	Describe the concept of Agile methodologies. Explain Scrum and Kanban model in	8	CO1	U
ii)	Illustrate SCM process.	8	CO5,CO6	U
iii)	Draw the component and deployment diagram Air Line reservation system.	8	CO3	Ap