

Jr-01

Date: 13/12/2022

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

**End Semester Exam**

Nov – Dec 2022-23

(B. Tech/M. Tech.) Program: Information Technology

Examination: SY Semester: III

Course Code: ITC305 Course Name: Foundation of Software Engineering

**Duration: 02 Hours**

**Max. Marks: 45**

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
<b>Q 1</b>	<b>Solve any 5 questions out of six.</b>	<b>15</b>		
i)	Explain generic process model.	03	CO1	U
ii)	Explain any one analysis model.	03	CO2	U
iii)	Describe Function point (FP) estimation technique.	03	CO3	U
iv)	Explain UML symbolic notation of data flow diagram.	03	CO4	U
v)	Explain importance of component diagram.	03	CO5	U
vi)	Describe Unit and integration testing.	03	CO6	U
<b>Q.2</b>	<b>Solve any three questions out of four.</b>	<b>15</b>		
i)	Explain Spiral software processing model	05	CO1	U
ii)	Describe PERT/CPM with example.		CO3	U
iii)	Describe White box testing in details.		CO6	U
iv)	Explain RAD software processing model.		CO1	U
<b>Q.3</b>	<b>Solve any three questions out of four.</b>	<b>15</b>		
i)	Explain SRS document with example.	05	CO2	Analyse
ii)	Design and explain Sequence diagram for Hospital. management.	05	CO4	Create
iii)	Describe Component diagram with any example.	05	CO5	U
iv)	Design and explain state chart diagram with example.	05	CO5	Create