Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous College Affiliated to University of Mumbai)

Mid Semester Examination

Max. Marks: 20 October 2022 Duration: 1hr.
Class: T.E. (V) Computer/IT Course Code: CS302/IT302
Name of the Course: Software Engineering

Instructions:
(1) All questions are compulsory
(2) Draw neat diagrams
(3) Assume suitable data if necessary

Q. No.		Max Marks	CO
Q.1 A	What is the difference between requirement analysis and specification? What are the important activities carried out during requirement analysis and specification phase?	5	CO1
Q.1 B	Draw Data Flow Diagram) for Railway Reservation System. (Level 0, Level 1, and Level 2 for any one process of level 1	5	CO2
Q.2 A	Define Asynchronous & self message in sequence diagram with one example method for each.(max 5 sentence) For the given scenario of a banking customer applying for loan, draw sequence diagram. Show synchronous, asynchronous and return message. A customer gives the application for loan to the bank . The bank teller sends the application to be processed by the bank manager and waits for the manager to approve/reject loan. The bank manager sends data to the credit agency for verification. The bank manager receives a response and approves or rejects loan. The bank teller sends a message to the customer about whether the loan was approved or rejected. Use line with a solid arrowhead to represent synchronous message and line with open/simple arrowhead to represent asynchronous message.	2+3	CO2
Q.2 B	What are 2 aspects of a software system that are explicitly omitted from the UML class diagram but captured in sequence diagram or state chart diagram? (only 2 sentences) Model the following with UML class diagram. a) During one soccer season, multiple players participate in multiple games. Each player scores in each game a certain number of goals. b) Every restaurant has at least one kitchen, one kitchen is part of exactly one restaurant.	2+3	CO2