

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA – SEMESTER III - EXAMINATION –SUMMER-2022**

**Subject Code: 639403****Date:06/06/2022****Subject Name: Software Engineering****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a) Do as directed**
1. What is software Process? **01**
  2. Explain software engineering **02**
  3. Differentiate between prescriptive and evolutionary process model **04**
- (b) Explain spiral model in detail. **07****
- Q.2 (a) Explain incremental model with proper diagram. **07****
- (b) Draw the activity and sequence diagram of online shopping system **07****
- OR**
- (b) Prepare Activity and Sequence diagram for ATM System. **07****
- Q.3 (a) List and explain the requirement engineering tasks **07****
- (b) Write a note on architectural style. **07****
- OR**
- Q.3 (a) List and explain the design concepts in detail **07****
- (b) Explain golden rules for interface design **07****
- Q.4 (a) Draw a class diagram for a bank system which contains data of customers (identified by name and address) and their accounts. Each account can be categorized into saving and current account. Each account has a minimum balance to be kept. Customer can withdraw certain amount as per norms of the bank. For any personal updates of customer, bank will update the details. Customer can view the summary details of his or her account **07****
- (b) Write a note on eliciting requirements **07****
- OR**
- Q.4 (a) Draw a use case diagram for an automated teller machine (ATM), where customer uses a bank ATM to check balances of his/her bank accounts, deposit funds, withdraw cash and/or transfer funds. ATM technician provides maintenance and repairs to the ATM. Make your own assumptions. **07****
- (b) Write a note on design classes. **07****
- Q.5 (a) Create agile document and burn charts of online library application **07****
- (b) What is scrum? Discuss scrum model detail **07****
- OR**
- Q.5 (a) Create agile document burn charts of online railway reservation application. **07****
- (b) Write a note on 12 principles of Agile software. **07****

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