# GUJARAT TECHNOLOGICAL UNIVERSITY
## MCA– SEMESTER III- EXAMINATION –SUMMER-2024

**Subject Code: 639403**                                      **Date: 18/05/2024**

**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.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

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| **Q.1** | **(a)** | What is SDLC? Describe briefly Generic Process Framework. | **07** |
| | **(b)** | What is Evolutionary Process Models?  Discuss why spiral model is called risk driven process model. | **07** |
| **Q.2** | **(a)** | Prepare SRS for College Management System. | **07** |
| | **(b)** | What is Requirement Engineering? List out Elements of Requirement Model. Discuss Class based element with example. | **07** |

**OR**

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| | **(b)** | What do you mean by Eliciting Requirements? What is its role in building analysis model? | **07** |
| **Q.3** | **(a)** | What is architecture? Discuss taxonomy of Architectural Styles. | **07** |
| | **(b)** | What is refactoring? Briefly describe four elements of the design model. | **07** |

**OR**

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| **Q.3** | **(a)** | What is abstraction? List out types of abstraction. Discuss the importance of data abstraction in the software design process. | **07** |
| | **(b)** | Explain three golden rules that form the basis of interface design in detail. | **07** |
| **Q.4** | **(a)** | Discuss briefly 12 Agile Principles. | **07** |
| | **(b)** | Discuss Scrum Rules in detail. | **07** |

**OR**

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| **Q.4** | **(a)** | Discuss Scrum and Scrum Value Revisited. | **07** |
| | **(b)** | Discuss the following terms: 1. Sprint, 2. Project Velocity, 3. User Stories. | **07** |
| **Q.5** | **(a)** | Draw an appropriate diagram of an order management system for state chart. | **07** |
| | **(b)** | Draw an interaction diagram for Library Management System. | **07** |

**OR**

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| **Q.5** | **(a)** | Draw an activity diagram for Online Ticket Booking System. | **07** |
| | **(b)** | What is milestone? Prepare TimeLine Chart. | **07** |

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