

Enrolment No. /Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED – SEMESTER III- EXAMINATION –SUMMER-2025

Subject Code: 2638603

Date: 19/06/2025

Subject Name: Structured and Object Oriented Analysis and Design

Methodology

Time:02:30 PM TO 05:00 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.

- Q.1 (a)** Do as directed : **07**
- (1) Full form of DFD.
 - (2) Full form of OLAP.
 - (3) What is TPS?
 - (4) Define : Class
 - (5) Define : Object
 - (6) Write about fork and join.
 - (7) Full form of SDLC.
- (b)** Do as directed : **07**
- (1) Draw basic symbols of DFD and write its meaning with example. (3 Marks)
 - (2) Write Role of System Analyst. (3 Marks)
 - (3) Define :Actor (1 Marks)
- Q.2 (a)** Draw DFD on Hotel Management System. **07**
- (b)** Write steps in Interview preparation. **07**
- OR**
- (b)** Explain steps of SDLC with suitable diagram. **07**
- Q.3 (a)** Draw DFD on Train Reservation System **07**
- (b)** Explain Structured English and Decision Tree with example. **07**
- OR**
- Q.3 (a)** Explain in detail : Data Mining **07**
- (b)** Draw DFD on School Management System. **07**
- Q.4 (a)** Explain class diagram with suitable example. **07**
- (b)** Write types of relationship with suitable example. **07**
- OR**
- Q.4 (a)** Explain Data Dictionary in detail. **07**
- (b)** Explain component diagram with suitable example. **07**
- Q.5 (a)** Draw use case diagram for online movie ticket booking system. **07**
- (b)** Write in details about forking and Joining in Activity diagram with Example **07**
- OR**
- Q.5 (a)** Draw use case diagram for online mobile shopping system. **07**
- (b)** Write about concept of Sequence diagram with suitable example **07**
