

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-III • EXAMINATION – SUMMER • 2015

Subject Code: 630001

Date: 07-05-2015

**Subject Name: Structured and Object Oriented Analysis
and Design Methodology**

Time: 02:30 pm - 05:00 pm

Total Marks: 70

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Draw figures whenever necessary.

- Q.1** (a) What is SDLC? Explain various stages of System Development Life Cycle. **07**
(b) What is Activity Diagram? Draw Activity Diagram for DVD Purchase System. **07**
- Q.2** (a) (1) DSS Stands for _____ **07**
(2) virtual reality systems is an example of _____
(3) Algebraic Notation Plus sign, means _____
(4) _____ is a class of persons, places or things.
(5) _____ is a unique attribute for the record.
(6) _____ means data about the data in the file or database.
(7) OLAP stands for _____
(b) What is Effective Coding? Explain the following Coding. **07**
(1) Function code (2) Unicode
- OR**
- (b) What do you mean by Form Designing? Discuss the Guidelines for Form Designing. **07**
- Q.3** (a) What is Object Orientation? Explain identity, classification, inheritance and polymorphism. **07**
(b) What do you mean by designing query? Discuss various types of queries. **07**
- OR**
- Q.3** (a) Write a note on (1) Data Dictionary and (2) Structured English **07**
(b) What is Generalization? Discuss the different purposes of Generalization with example. **07**
- Q.4** (a) Write a note on (1) State Diagram and (2) Nested State Diagrams **07**
(b) What is Decision Tree? Discuss Decision Table with suitable example **07**
- OR**
- Q.4** (a) Write a note on (1) Types of Interface and (2) Input Validation **07**
(b) What is Designing? Discuss points to be considered while designing Dialog. **07**
- Q.5** (a) What is Class Diagram? Draw Class Diagram for ATM system **07**
(b) Differentiate Logical DFD v/s Physical DFD with suitable Example **07**
- OR**
- Q.5** (a) What is Class Attributes? Draw Class Diagram for Magazine Subscription **07**
(b) What is Use Case Diagram? Explain it with suitable Example **07**
