

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA – SEMESTER – III • EXAMINATION – SUMMER 2018

Subject Code: 2630001

Date: 18-May-2018

Subject Name: Structured & Object Oriented Analysis & Design Methodology

Time: 02.30 pm to 5.00 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)** Fill in the blanks with appropriate words **07**
1. _____ shows set of use cases and actors and their relationships
 2. KWS Stands for _____
 3. First step in analyzing requirement is to construct _____ model.
 4. Purpose of DFD can be _____
 5. _____ means data about the data in the file or database.
 6. OLAP stands for _____
 7. Abstract class means _____
- (b)** Define SDLC. Explain stages of analysis and design of system in SDLC. **07**
- Q.2 (a)** Explain the types of systems. **07**
- (b)** Explain Structured English and Decision Tree with suitable example. **07**
- OR**
- (b)** Discuss Generalization, Association, Composition in UML with example **07**
- Q.3 (a)** Explain the output technologies in brief **07**
- (b)** List different requirement gathering techniques. Explain any one in detail with advantages and disadvantages **07**
- OR**
- Q.3 (a)** Explain types of Interview question structure **07**
- (b)** Draw DFD on School Management System **07**
- Q.4 (a)** Draw state diagram of telephone with description of each states **07**
- (b)** Define event. Explain types of event with example. Also differentiate event with state in brief. **07**
- OR**
- Q.4 (a)** Define State. Describe State Transition and Conditions with example. Draw one shot State diagram. **07**
- (b)** What is Interaction diagram? Explain Structured Controls in Sequence diagram **07**
- Q.5 (a)** What is Class diagram? Explain it with suitable example. **07**
- (b)** What is Object oriented Modeling? Explain it with characteristics **07**
- OR**
- Q.5 (a)** What is Use Case diagram? Compare include and extend relationship of Use Case diagram with suitable example. **07**
- (b)** Draw an activity diagram for social networking site where first time users will log on the registration page and register themselves as a member of the site. **07**
