

Roll No.

67192

MCA 4th Semester CBCS Scheme

w. e. f. 2017-18

Examination – May, 2019

OBJECT ORIENTED ANALYSIS & DESIGN USING UML

Paper : 17MCA34C2

Time : Three Hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Question No. 1 is compulsory. Attempt four more question selecting one from each Unit. All questions carry equal marks.

1. Answer the following questions briefly : 2 × 8 = 16

- (a) What is Use Case diagram.
- (b) Discuss modularity and its uses.
- (c) Explain differences between event, action and state.

- (d) Describe boundary conditions briefly.
- (e) Explain association with an example.
- (f) Discuss semantic rules with examples.
- (g) What do you mean by typing.
- (h) What is state model.

UNIT – I

- 2. (a) What is sequence diagram ? How is it useful and used ? Discuss with examples. 8
- (b) Discuss uses and advantages of object and class diagrams with examples. 8
- 3. Explain the following briefly with suitable examples :
 - (i) Component diagram and its uses and advantages 8
 - (ii) Dependency, Generalization, Realization and their uses 8

UNIT – II

- 4. (a) What is abstraction and abstract class ? How these are useful and used ? Explain with suitable examples. 8
- (b) Discuss persistence of objects with suitable examples in detail. 8

5. Describe the following with examples :

- (i) Class model and its uses 8
- (ii) Link attributes and meta data 8

UNIT – III

6. (a) What is nested state diagram ? How is it used and useful ? Explain with suitable examples. 8

- (b) Discuss interaction modeling and its advantages with examples. 8

7. Explain the following with examples :

- (a) Activity and sequence models and their uses 8
- (b) Relationship between class and state models 8

UNIT – IV

8. (a) Define boundary conditions ? How these are handled and useful ? Discuss with suitable examples. 8

- (b) Explain domain class model with examples. 8

9. Explain the following with examples :

- (a) System design 8
- (b) Software control strategies 8