

B.Tech III Year II Semester (R13) Regular & Supplementary Examinations May/June 2017
OBJECT ORIENTED ANALYSIS, DESIGN & MODELING
(Computer Science & Engineering)

Time: 3 hours

Max. Marks: 70

PART - A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Give any two differences between algorithmic and object oriented decomposition.
 - (b) List any four elements of object model.
 - (c) Differentiate between state and behavior of an object with examples.
 - (d) With a neat diagram, give an example for multilevel inheritance.
 - (e) Briefly explain the extensibility mechanisms in UML.
 - (f) Draw a neat dependency relationship's diagram for course schedule.
 - (g) Differentiate between class and object diagrams.
 - (h) Differentiate between forward and reverse engineering.
 - (i) Define signal. Give an example.
 - (j) List any two uses of state chart diagrams.

PART - B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

- 2 How does object model evolved? Explain.

OR

- 3 (a) List and explain five attributes of a complex system.
(b) Explain briefly about any two elements of object model with examples.

UNIT - II

- 4 Write a brief note on the following:

- (a) Visibility.
- (b) Synchronization.

OR

- 5 Explain with examples the relationships among classes.

UNIT - III

- 6 Explain briefly the steps to model vocabulary and the distribution of responsibilities in a system with examples.

OR

- 7 Explain briefly the UML notations with examples for the following:

- (a) Note.
- (b) Stereotypes.
- (c) Tagged values.
- (d) Constraints
- (e) Standard elements.

Contd. in page 2

UNIT - IV

8 Draw a neat class diagram for student database system by identifying the proper classes, their attributes and behavior and the relationships among them.

OR

- 9 (a) Explain the procedure to model the semantics of a class.
(b) Write aggregation/composition diagram for the following relationships among classes:
(i) Parts of a car. (ii) Players of a team.

UNIT - V

10 Draw collaboration and sequence diagrams for the following scenarios of a student database system respectively:

- (a) Register a course.
(b) Viewing results of current semester.

OR

11 Define activity diagram. List out UML notations used in it. Write an activity diagram for a student database management system.
