**R13** 

Code: 13A05602

## B.Tech III Year II Semester (R13) Regular Examinations May/June 2016

## **OBJECT ORIENTED ANALYSIS, DESIGN & MODELING**

(Computer Science and Engineering)

Time: 3 hours Max. Marks: 70

## PART – A

(Compulsory Question)

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- 1 Answer the following:  $(10 \times 02 = 20 \text{ Marks})$ 
  - (a) Distinguish between object-oriented and object-based languages.
  - (b) What are the purposes that design serve?
  - (c) Expand CRC card. Write uses of CRC cards.
  - (d) What are the advantages of classification?
  - (e) What are the elements of a class? Illustrate with example.
  - (f) What are the relationships used in an object diagram?
  - (g) Explain types and roles.
  - (h) Describe interaction diagrams.
  - (i) What are the state machines? Explain state machine with a diagram.
  - (j) What are the different types of components? Explain each briefly.

## PART - B

(Answer all five units,  $5 \times 10 = 50 \text{ Marks}$ )

[ UNIT – I ]

2 State and explain five attributes of a complex system.

OR

What are the benefits of the object model?

[ UNIT - II ]

4 Explain the five metrics that measure the quality of abstraction.

OF

5 Why the classification is difficult? How classes and objects are identified?

UNIT - III

6 Explain the modeling of system's architecture with diagram.

OR

7 Explain about common mechanisms in the UML.

[UNIT - IV]

8 Draw the use case diagram to show the functions of a credit card validation system.

OR

9 Explain modeling object structures.

[ UNIT – V ]

10 How do you model the inter-process communication using the UML?

OR

11 Explain the common uses of activity diagrams.

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