**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) 1 Answer the following:  $(10 \times 02 = 20 \text{ Marks})$ Distinguish between object-oriented and object-based languages. (a) What are the purposes that design serve? (b) Expand CRC card. Write uses of CRC cards. (c) What are the advantages of classification? (d) What are the elements of a class? Illustrate with example. (e) What are the relationships used in an object diagram? (f) Explain types and roles. (g) Describe interaction diagrams. (h) (i) What are the state machines? Explain state machine with a diagram. (i) 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. What are the benefits of the object model? 3 UNIT – II Explain the five metrics that measure the quality of abstraction. 4 **OR** 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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