

Roll No

IT-7002 (CBGS)**B.E. VII Semester**

Examination, November 2019

Choice Based Grading System (CBGS)**Object-Oriented Analysis and Design***Time : Three Hours**Maximum Marks : 70***Note:** i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Discuss and differentiate between links and associations concepts.
b) What is generalization in object oriented paradigm? Also differentiate between generalization and specialization with suitable example.
2. a) Explain the role of Abstraction, Inheritance, Multiple Inheritance and Encapsulation with suitable example and sketch.
b) What do you mean by object-oriented system development life-cycle? Also explain the main advantages of object-oriented development.
3. a) What is Object Modeling Technique (OMT)? Explain object model and functional model with suitable example and sketch.
b) Describe object diagram, state diagram and data flow diagram with use of each one in suitable sketch.

4. a) Explain object-oriented design approach with suitable example and sketch.
b) Describe design algorithms and design optimization methods with suitable example.
5. a) Why use-case driven approach is required? Explain a use case driven approach to requirement gathering with suitable example. <http://www.rgpvonline.com>
b) How object-oriented design is translated into implementation? Explain with example.
6. a) Compare object-oriented programming languages C++ and Java using proper example.
b) What do you mean by Unified Modeling Language (UML)? Describe its role by proper example.
7. a) Discuss and differentiate class diagram, sequence diagram and use case diagram by suitable sketch and example.
b) Draw a state diagram of ATM machine.
8. a) What do you mean by relational database? Also differentiate it with object-oriented database with example.
b) Describe the following:
 - i) Chart diagram
 - ii) Activity diagram
