

**B.Tech. - VIEP - COMPUTER SCIENCE AND  
ENGINEERING (BTCSVI)**

**00615 Term-End Examination  
June, 2014**

**BICSE-002 : OBJECT ORIENTED DESIGN AND  
PROGRAMMING**

*Time : 3 hours*

*Maximum Marks : 70*

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**Note :** Answer any *seven* questions. All questions carry equal marks.

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1. (a) What is object-oriented programming model ? Why do we opt for the object oriented approach ? 5
- (b) What are the features of object orientation ? 5
2. Define the following : 5×2=10
  - (i) Link and Association
  - (ii) Generalization and Aggregation
3. (a) What is the function of a State diagram ? How are state diagrams represented in different models ? 5
- (b) What are the steps performed in constructing a dynamic model ? 5

4. Describe processes and their functions in Functional Modelling. What is the function of dataflow in handling process ? 10
5. (a) Write the policies for Detailed Design Dealing with temporal data. 5  
(b) Explain ONN constructs. 5
6. Define the term System Architecture. What are the essential aspects of system architecture ? Explain with example. 10
7. (a) What are the steps to be followed during object design phase ? 5  
(b) Define the term DBMS. Explain various approaches of designing the database. 5
8. (a) Differentiate between : 5  
(i) Weak versus Strong Typing.  
(ii) Physical versus Logical Models.  
(b) Write the characteristics of a Functional Model. 5
9. (a) Define Object Model Transformations. Explain how object models are elaborating. 5  
(b) Draw the object model for online gaming system. 5
10. Write short notes on any *two* of the following :  $5 \times 2 = 10$   
(a) Multiple Inheritance  
(b) Metadata  
(c) Packages
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