| BICSE-002 |

B.Tech. – VIEP – COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

00147   **Term-End Examination**
December, 2014

BICSE-002 : OBJECT ORIENTED DESIGN AND PROGRAMMING

Time : 3 hours   *Maximum Marks : 70*

Note : *Answer any **seven** questions. All questions carry equal marks. Assume suitable missing data, if any.*

1. (a) What is object-oriented programming ? What are the essential features of object-oriented programming ?   *5*

    (b) Define Aggregation and Generalization.   *5*

2. (a) What is the relation between Link and Association ? Explain with suitable example.   *5*

    (b) Define the following terms : Object, Class, Superclass and Subclass.   *5*

3. What is Object Modeling Technique ? What are the various models being used by OMT to describe a system ?   *10*

4. (a) Describe processes and their functions in functional modeling.   *5*

    (b) Describe how are DFD useful in functional modeling.   *5*

5. (a) Define the term System Architecture. What are the essential aspects of system architecture ? *5*

   (b) Draw an object model to describe any undirected graph. *5*

6. What steps followed while designing a System Design ? Explain each of them. *10*

7. Explain the following with suitable examples : *10*
   (a) Reusability
   (b) Extensibility
   (c) Robustness

8. Define the following terms : *10*
   (a) State
   (b) Behaviour
   (c) Identity
   (d) Pseudocode
   (e) Metadata

9. (a) Explain the Object Model and the Functional Model. *5*

   (b) Explain Object Meta Model with suitable example. *5*

10. Write short notes on any *two* of the following : *2×5=10*
   (a) Package
   (b) Dynamic Model
   (c) Database Management Paradigm

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