

**DIPLOMA – VIEP – COMPUTER SCIENCE AND
ENGINEERING (DCSVI)**

00285

Term-End Examination

June, 2017

BICSE-005 : OBJECT MODELING AND DESIGN

Time : 2 hours

Maximum Marks : 70

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

1. What is the importance of modeling in software development ? Explain UML conceptual model with the help of an example. 10
2. Draw a class diagram for banking system which provides services for different types of accounts such as Savings Account, Fixed Deposit and Current Account. 10
3. What are use case diagrams ? Describe the notations involved in drawing a use case diagram. Draw a use case diagram for a Hospital Management System. 10
4. Draw an activity diagram for a bank ATM system. 10
5. Describe the use of a state chart diagram. Draw a state chart diagram for an online railway ticket booking system. 10

6. Briefly discuss any *two* of the following with the help of suitable diagrams and examples : $2 \times 5 = 10$

- (a) Interaction diagram
- (b) Object diagram
- (c) Interfaces

7. What is association ? How is it associated with aggregation ? Explain with the help of a suitable example and diagram. 10

8. What is behavioural modeling ? Explain how events and signals are used in behavioural modeling with the help of an example and diagram. 10

9. Describe the use of deployment diagram. Draw deployment diagram for an online admission system. 10

10. Write short notes on any *two* of the following : $2 \times 5 = 10$

- (a) Structural Modeling
- (b) UML
- (c) State Machine