

Scheme – E
Sample Question Paper

Course Name : Diploma in Computer Technology and Information Technology

Course Code : IF/CM

Semester : Sixth Semester

12260

Subject Title : Object Oriented Modeling and Design

Marks : 100

Time: 3 Hrs.

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q.1A) Attempt any THREE of the following:

12 Marks

- 1) Describe CRC card method by Cunningham.
- 2) State the importance of Modeling in UML.
- 3) Differentiate between Aggregation and Association.
- 4) Describe Software development life cycle of UML.

Q.1B) Attempt any ONE of the following:

06 Marks

- 1) State approaches of OMT by Ram Baugh.
- 2) How to apply constraints in Class Diagram.

Q.2 Attempt any TWO of the following:

16 Marks

- 1) Explain the concept of Generalization and Inheritance with suitable example.
- 2) Describe Architectural Meta-model of UML.
- 3) Draw Sequence diagram for placing purchase order.

Q.3 Attempt any FOUR of the following:

16 Marks

- 1) Describe Qualification and Role Name with suitable example.
- 2) Describe Recursive Aggregates with proper diagram.
- 3) Explain the term Multiple Inheritance with example.

- 4) How to use 'types' in Advanced Class diagram.
- 5) Draw a Class diagram for different dimensional figures on window screen.

Q.4 A) Attempt any THREE of the following:

12 Marks

- 1) What is Dynamic Model? State its purpose with suitable example.
- 2) Describe Propagation of Operation with suitable example.
- 3) Draw Object diagram for Hospital Management System.
- 4) Draw Sequence diagram for issuing books from library.

Q.4 B) Attempt any ONE of the following:

06 Marks

- 1) List Six UML diagrams and state purpose of each.
- 2) Draw a Class diagram for issuing and returning books from library.

Q.5 Attempt any TWO of the following:

16 Marks

- 1) Draw Activity diagram for withdrawing money from ATM.
- 2) Draw Use-Case diagram for student admission system.
- 3) Describe Branching and Forking in Activity diagram.

Q.6 Attempt any FOUR of the following:

16 Marks

- 1) Describe Structural and Behavioral things in Conceptual Model of UML.
- 2) Draw Class diagram for railway reservation system.
- 3) Explain components of State Chart diagram with example.
- 4) Draw Component diagram for ATM system.
- 5) Describe Deployment diagram with suitable example.