END TERM EXAMINATION

SECOND SEMESTER [MCA] JUNE 2024

Paper Code: MCA-104   **Subject: Object Oriented Software Engineering**

Time: 3 Hours   **Maximum Marks: 60**

Note: Attempt all questions as directed. Internal choice is indicated.

Q1   Attempt **any four** out of the following: **(4x5=20)**

(a)   Generalization and Specialization in UML.
(b)   Draw the System Sequence diagram for Online Ordering System.
(c)   Designing the data access layer
(d)   Testing strategies
(e)   Draw the deployment diagram for Hotel Management System.
(f)   4+1 view architecture of UML.
(g)   Draw the use case diagram for Online Ordering system.

UNIT-I

Q2   Draw and explain the Rational Unified Process. Draw a comparison between traditional lifecycle v/s the Object-Oriented Model.   **(10)**

OR

Q3   System Development is model building. Explain in detail.   **(10)**

UNIT-II

Q4   Explain the Unified Process and Inception phase in detail. What does Project Monitoring and Control include?   **(10)**

OR

Q5   Draw and explain the requirement model for the recycling machine case study.   **(10)**

UNIT-III

Q6   How the analysis model serves as a basis for the design model. Explain by taking example of the recycling machine case study.   **(10)**

OR

Q7   Explain the following reusable design patterns: **(10)**

(a)   Singleton
(b)   Iterator
(c)   Adaptor
(d)   Observer

UNIT-IV

Q8.   Why is testing required? Explain the various types of tests. Also explain the difference between manual and automated testing.   **(10)**

OR

Q9   Write short notes on: **(10)**