St. Joseph's College of Arts & Science (Autonomous)

PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE

SUBJECT CODE- PCS702S

OBJECT ORIENTED ANALYSIS AND DESIGN AND UML

Unit-1

1. Explain in details the OOSD life cycle
2. Explain in detail about Inheritance.
3. List advantages of using OOP concept in software development.
4. Define: Objectory.
5. Write a brief description on the following terms.
   a) Encapsulation and Information hiding
   b) Inheritance and Polymorphism
   c) Associations and Aggregations
6. Explain clues hierarchy.

Unit-2

7. Explain Pattern nard Framework.
8. Discuss about any four Design Patterns.
9. Explain the Architectural Modeling Components in detail
10. Explain the advantages of pattern in object-oriented methodologies
11. Explain the two types of Booch Methodology development process.
12. Write short notes on patterns and framework.

Unit-3

13. Explain static and Dynamic Binding?

14. What are the different UML Diagrams?

15. Explain any one of them briefly. Draw a use case diagram for a Student information system. State your assumptions.

16. Explain about transition and guard condition while modeling using state diagrams.

17. What are Static and Dynamic Models? Explain.

18. Write short notes about Static and Dynamic Models

19. Explain about Activity diagrams. Illustrate with a simple example

20. Explain about Processes and Threads in behavioral modeling.

21. Write short notes on

a. Component diagram

b. Deployment diagram

Unit-4

22. Explain the object-oriented design axioms and corollaries.

23. Write short note on: i) Coupling ii) Cohesion

24. Explain the design patterns.

25. Explain use case model.

Unit-5

26. Differentiate between object-oriented approach and top-down approach

27. Distinguish between verification and validation.

28. Distinguish between Alpha testing and Beta testing.

29. Elaborate on the Black box and White box testing strategies.