# STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086 (For candidates admitted during the academic year 2011-12 & thereafter)

**SUBJECT CODE: 11CS/PC/OU24** 

# M. Sc. DEGREE EXAMINATION, APRIL 2014 INFORMATION TECHNOLOGY SECOND SEMESTER

COURSE : CORE

PAPER : OBJECT ORIENTED SYSTEMS DEVELOPMENT USING UML TIME : 3 HOURS MAX. MARKS : 100

Section A

# **Answer all the questions:**

 $10 \times 2 = 20$ 

- 1. Give reasons for taking up object orientation.
- 2. What is aggregation?
- 3. Define generative and non-generative patterns.
- 4. What is a statechart diagram?
- 5. Define the two properties of a part-of-relationship.
- 6. What is a use case?
- 7. Define axiom and corollary.
- 8. What are the types of attributes?
- 9. Name the distributed objects computing standards.
- 10. What is the purpose of a view layer interface?

#### **Section B**

# Answer any six of the following questions:

 $6 \times 5 = 30$ 

- 11. Explain prototyping.
- 12. Describe UML class diagrams.
- 13. Illustrate uses and extends associations with a neat diagram.
- 14. Describe macro and micro development process of Booch methodology.
- 15. Give an explanation on common class patterns for finding candidate class and objects.
- 16. Explain coupling and cohesion.
- 17. Elucidate multi database system.
- 18. Describe the process of designing view layer classes.

### **Section C**

#### Answer any five of the following questions:

 $5 \times 10 = 50$ 

- 19. Explain use case approach to object oriented system development.
- 20. Describe in detail the interaction diagram.
- 21. Define actor and explain identification of actors and guidelines for finding use cases.
- 22. Describe design patterns.
- 23. Explain about associations.
- 24. Explain the following:
  - a. Designing methods and protocols.
  - b. Guidelines for developing effective documentation.
- 25. Give a detailed description on object oriented database management systems.

