SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY DEEMED UNIVERSITY

Course: B.E./B.Tech. Semester: III

Title of the paper: Object Oriented Programming & Design

Max. Marks: 80

Sub. Code: 12406 (2001) Time: 3 Hours

PART – A $(10 \times 2 = 20)$ Answer ALL the Questions

1. Is class an object? Justify.

- 2. What is the difference between a method and a message?
- 3. How do you identify a method in an object?
- 4. What is prototyping and why is it useful?
- 5. What is an inline function?
- 6. Where does "this pointer" point to?
- 7. Define constructor with an example.
- 8. How do you overload an operator?
- 9. What is a virtual function?
- 10. How do you handle exceptions in C++?

PART - B (5 x 12 = 60) Answer ALL the Questions

11. Explain conceptual clustering in detail.

(or)

- 12. Describe the types of relationships among classes with suitable examples.
- 13. Explain the traditional techniques for the Object Oriented model. (or)
- 14. Explain the various approaches to identify service and methods.

15. Describe in detail the need for a friend classes and friend functions in C++.

(or)

- 16. Explain the different types of constructors with suitable examples.
- 17. Briefly explain how to create templates in C++ with an example.

(or)

- 18. Explain the different types of function overloading with suitable examples.
- 19. Write short notes on:
 - (a) private inheritance
 - (b) public inheritance

(or)

- 20. Write short notes on:
 - (a) derived class constructor
 - (b) overriding member function