## SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E/B.Tech – CSE/IT (Dual CSE)

Title of the paper: Object Oriented Programming & Design

Semester: III Max.Marks: 80 Sub.Code: 412306-511306-512306-6C0045 Time: 3 Hours Date: 30-04-2009 Session: AN

> PART – A Answer All the Questions

 $(10 \times 2 = 20)$ 

- 1. What do you mean by conceptual clustering?
- 2. Define object.
- 3. Define an attribute.
- 4. Service What is this?
- 5. What does 'this' pointer points to?
- 6. What is a new operator?
- 7. What are the C++ operators that cannot be overloaded?
- 8. Define inline function.
- 9. How are the exceptions handled in C++?
- 10. What does seekg and tellg functions do?

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

11. Explain in detail about classification?

(or)

- 12. Write short notes on
  - (a) classes
  - (b) UMI
- 13. Explain in brief about one current technique for object modeling? (or)
- 14. Write short notes on
  - (a) List the ways of identifying the attributes.
  - (b) Specify the methods in object Modeling.
- 15. Explain Constructors and Destructors in detail.

(or)

- 16. What is a Friend Function? Explain with an example C++ program.
- 17. Explain Operator overloading. Write a C++ program to add two complex numbers by overloading the '+' operator.

(or)

- 18. (a) Write a C++ Program to find the area of shapes such as Square, Triangle and Rectangle using function overloading.
  - (b) Write short notes on Templates.
- 19. (a) Write a C++ program to catch all exceptions.
  - (b) Explain Virtual Functions.

(or)

- 20. (a) Explain with an example how constructors are called when a derived class object is created.
  - (b) Explain Multiple Inheritance with an example C++ program.