G 2099 (Pages 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2010

Fourth Semester

Branch : Computer Science and Engineering

OBJECT ORIENTED PROGRAMMING (R)

(2008 admissions—Regular—2007 admissions—Improvement/Supplementary)

Time : Three Hours Maximum : 100 Marks

Answer **all** *questions.*

Part A

Each question carries 4 *marks.*

1. What kind of things can become objects in OOP ?
2. What are the special properties of constructor functions ?
3. What is a virtual base class ?
4. What is a friest function ?
5. Explain how polymorphism is achieved at (i) Compile time ; (ii) run time.
6. What are the advantages of overloading operators ?
7. Differentiate between class and template class. Give examples for each.
8. What are the uses of named and unnamed name spaces ?
9. What is an in-line function ?
10. Discuss the object oriented features of Java.

(10 × 4 = 40 marks)

Part B

Each question carries 12 *marks.*

11. (a) Explain with examples the mechanism of creating and using object and classes.

Or

(b) Write a brief account on the evolution of object oriented languages.

Turn over

12. (a) Explain with examples the methods of member access control in classes.

Or

(b) Write a brief account on the types of inheritance.

13. (a) Explain with examples the need and method of function overloading.

Or

(b) Explain with an example the uses of abstract classes.

14. (a) Write a brief account on virtual destructors.

Or

(b) Differentiate between class template and template class. Explain the uses of each.

15. (a) Explain with an example the use of in line functions.

Or

(b) Discuss the object oriented features of Java.

(5 × 12 = 60 marl