

D 281

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2003.

Fourth Semester

Electrical and Electronics Engineering

EE 237 — OBJECT ORIENTED PROGRAMMING

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Data abstraction with respect to C++.
2. How a class is declared?
3. Name the input and output statements in C++.
4. What is a scope resolution operator and how it can be used for global variable?
5. What are the two types of the members of the class and how are they declared?
6. What is meant by binding?
7. Can array become private member of class? How?
8. What is meant by anonymous union?
9. What is a static data member?
10. What is meant by polymorphism?

PART B — (5 × 16 = 80 marks)

11. Describe the principal features of object-oriented programming. (16)
12. (a) (i) Illustrate the reserved word inline with two examples. (8)
(ii) Explain the constructors and destructors. (8)

Or

- (b) Write a C++ program to implement Stack and its operations PUSH and POP. (16)
13. (a) (i) Define Friend class and specify its importance. Explain with suitable example. (8)
- (ii) Explain the operators used for dynamic memory allocation with examples. (8)

Or

- (b) Explain operator overloading with the implementation of Complex numbers and its numeric operations addition, subtraction, multiplication and division. (16)
14. (a) (i) Describe functional overloading with example. (8)
- (ii) Write short notes on connection and derived classes. (8)

Or

- (b) Explain virtual function in C++. Describe any two applications in which virtual functions may use. For each of these applications, specify the parent classes and derived classes. (16)
15. (a) Write a C++ program to convert Delta network (∇) to star (Y) network. (16)

Or

- (b) Partition a software development problem of your choice into classes, sub classes, objects and methods at the highest level of design. (16)
