1995 Paper 6 Question 5

Programming in C and C++

Write brief notes on *four* of the following aspects of the language C++. In some of the cases it may be appropriate to compare what C++ does with the situation in other programming languages such as C, ML or Modula-3.

- (a) Overloaded functions and operators.
- (b) Templates as a way of achieving operations on lists where the types of the items in the lists must be kept flexible.
- (c) Consistency checks when a program is kept in several files and these are compiled at different times.
- (d) Inheritance and virtual functions.
- (e) The problems of writing code that is portable from one host machine to another.

[5 marks each]