

## 1995 Paper 4 Question 1

### Further Modula-3

Describe the facilities provided in Modula-3 for abstraction through object inheritance and partial revelations of opaque types. [8 marks]

Illustrate your answer by reference to the Trestle toolkit, mentioning the relationship between `VBT.T`, `VBT.Leaf`, `VBT.Split`, `Filter.T` and their sub-types. [4 marks]

Explain how overriding methods such as `mouse`, `position` and `keyboard` in a sub-type of `VBT.T` can be used to define a new class of window. [4 marks]

How is initialisation of super-types handled? [4 marks]