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 \texttt{VBT.T}, \texttt{VBT.Leaf}, \texttt{VBT.Split}, \texttt{Filter.T} and their sub-types. [4 marks]

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

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