1. **Describe** the following types of code, making clear what each is used for:

(a) Machine code [2]

(b) Assembly code [2]

(c) High level code [2]

(d) Bytecode [2]

2. **State two** disadvantages of each of the following methods of generating executable code:

(a) compiler [2]

(b) interpreter [2]

3. **Describe** what happens during the lexical analysis phase of compilation. [3]

4. **State** one aim of code optimisation by a compiler. [1]

5. **Describe** the need for function libraries and explain how the compiler ensures they can be   
called from a program. [4]

[Total 20 marks]