



Year 11 PLC – Paper 2 Computer Systems **May**

2.1 Algorithms

- How to produce algorithms using pseudocode
- Interpret, correct or complete algorithms.

2.2 Programming techniques

- Use of variables, , constants, operators, inputs, outputs and assignments
- The use of the three basic programming constructs used to control the flow of a program: sequence, selection and iteration (count and condition controlled loops)
- The use of data types.
- The common arithmetic operators.

2.3 Producing robust programs

- maintainability: comments and indentation

2.4 Computational logic

- Why data is represented in computer systems in binary form.
- Truth Tables

2.6 Data Representation

- How to add two 8 bit binary integers and explain overflow errors which may occur.
- The use of ASCII.
- How sound can be sampled and stored in digital form.
- How sampling intervals and other factors affect the size of a sound file and the quality of its playback: sample size, bit rate and sampling frequency.
- Compression