OCR Computer Science J277 March Mock Examination Paper 2

Topic	Sub topic
2.1 Algorithms	Abstraction, decomposition, creating and interpreting algorithms, trace tables, searching and sorting algorithms.
2.2 Programming fundamentals	Variables, constants, boolean operators (AND,OR, NOT), comparison operators, and arithmetic operators. Programming fundamentals: sequencing, selection and iteration. Data types, string manipulation, random number generaton, sub routines.
2.3 Producing robust programs	Defensive design, input validation and maintainability. Testing – iterative and terminal, syntax and logic errors. Testing with valid(normal and boundary), invalid (erroneous) data.
2.4 Boolean logic	AND, OR, NOT gates and truth tables.
2.5 Programming languages and integrated development environments	High and low-level languages, translators, compilers and interpreters, common tools in an IDE.