Contents of the January Mock Exams
Paper 1 and Paper 2

Mr Ravenscroft - November 2020

Topics on the mock exam - Paper 1

Covered on paper 1

- Networks - Client Server

- Purpose of network hardware and what it does

- Threats to a network

- Databases - entity relationship diagrams and key identifiers

  - Hashing - how it can be used

  - Referential Integrity

- Object orientated skills - writing a constructor and class. Pseudocode for various questions.

Topics on the mock exam - Paper 1
Continued

- Binary conversion / Floating Point / Karnaugh Maps

- D Type Flip Flop circuit

- Little Man Computing

- Object orientated vs procedural programming

- Operating system

  - Virtual memory

  - Device drivers

  - Utility software

- Libraries and linkers

Topics on the mock exam - Paper 2

Covered on paper 2

- Abstraction, Decomposition, Concurrent Processing

- Trees and their traversal - breadth and depth.

- Graphs

- Recursion and recursive tracing.

- Big O notation - compare and contrast two algorithms

- Sorting algorithms - understnading

- Queue - adding and removing items from a queue.

  - What is a circular queue and what makes it different to a linear queue.

- Linked lists - pointers, removing from a list.

Topics on the mock exam - Paper 2

Continued

- Producing pseudocode for a class.

- Constructors.

- Features of an IDE.

- Benefits of using Object Orientated programming.