Computer Science

Paper 1: Computer Systems

Monday 16th May pm

- 1.1: Systems Architecture: CPU purpose, components & Von Neumann architecture (the registers)
- 1.2: Memory & Storage: RAM, ROM, secondary storage and all of binary
- 1.3: Networking: hardware, the internet, wired/wireless connections, protocols, IP/MAC addresses
- 1.4: Network Security: identifying and preventing vulnerabilities
- 1.6: Ethical, legal, cultural and environmental impacts of digital technology

Paper 2: Algorithms

Friday 27th May pm

- 2.1: Algorithms: abstraction, decomposition, flowcharts, trace tables, sort & search algorithms
- 2.2: Python coding, sequence, selection & iteration, datatypes, lists/arrays, sub-programs (procedures & functions), reading/writing files, SQL
- 2.3: Robust programs: defensive design, input validation, code maintainability, testing
- 2.4: Boolean logic: logic gates & truth tables
- 2.5: Programming languages & IDEs: high/low level languages, types of translators, features of IDEs
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