Computer Science Learning Journey AQA

Paper 2- 3.7 Relational databases and structured query language (SQL)
- 3.7.1 Relational databases
- 3.7.2 Structured query language (SQL)

Paper 2 - 3.8 Ethical, legal and environmental impacts of digital technology on wider society, including issues of privacy

Paper 1 & 2 – Exam preparation including indentation grids, walk n talk and exam technique (3.7)
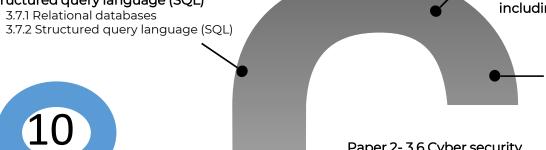
Paper 1 - 3.1 Fundamentals of algorithms
- 3.1.1 Representing algorithms
- 3.1.2 Efficiency of algorithms
- 3.1.3 Searching algorithms
- 3.1.4 Sorting algorithms

Paper 2- 3.6 Cyber security
- 3.6.1 Fundamentals of cyber security
- 3.6.2 Cyber security threats
- 3.6.2.1 Social engineering
- 3.6.2.2 Malicious code (malware)
- 3.6.3 Methods to detect and prevent cyber security threats

Paper 1 - 3.2 Programming
- 3.2.1 Data types
- 3.2.7 Input/output
- 3.2.3 Arithmetic operations in a programming language
- 3.2.10 Structured programming and subroutines (procedures and functions)
- 3.2.2 Programming concepts
- 3.2.4 Relational operations in a programming language
- 3.2.5 Boolean operations in a programming language
- 3.2.6 Data structures
- 3.2.11 Robust and secure programming
- 3.2.8 String handling operations in a programming language
- 3.2.9 Random number generation in a programming language

Paper 2- 3.5 Fundamentals of computer networks
- Computer network
- Main types of computer network
- Network connections
- LAN topologies
- Network protocols
- 4 layer TCP/IP model
- Network security

Paper 2- 3.4 Computer systems
- 3.4.1 Hardware and software
- 3.4.2 Boolean logic
- 3.4.3 Software classification
- 3.4.4 Classification of programming languages and translators
- 3.4.5 Systems architecture

Paper 2- 3.3 Fundamentals of data representation
- 3.3.3 Units of information
- 3.3.1 Number bases
- 3.3.2 Converting between number bases
- 3.3.4 Binary arithmetic
- 3.3.5 Character encoding
- 3.3.6 Representing images
- 3.3.7 Representing sound
- 3.3.8 Data compression

10

11

Computer Science Components:
- Paper 1: Computational thinking and programming skills Written exam: 2 hours, 90 marks 50% of GCSE
- Paper 2: Computing concepts Written exam: 1 hour 45 minutes, 90 marks, 50% of GCSE

Year 11 Dates
- Paper 1: Computational thinking and programming skills exam (early May)
- Paper 2: Computing concepts exam (early June)

HL year 10 and 11
- HL consists of: Quizlet for definitions, topic exam practice, coding questions, GCSE POD for consolidation and trace table practice

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