OCR Computer Science J277 Paper 1 End of Year Exam

Year 10 - June 2025

J277/01: Computer Systems

This component will assess:

1.1 Systems Architecture

o Architecture of the CPU

o CPU Performance

o Embedded systems

1.2 Memory & Storage

o Primary Storage

Secondary Storage

o Units of memory

o Data Storage

NumbersCharacters

Images

o Sound

Compression

1.3 Computer Networks, connections and protocols

Networks and topologies

Wired and wireless networks, protocols and layers

1.4 Network Security

Threats to computer systems and networks

o Identifying and preventing vulnerabilities

1.5 System Software

Operating systems

Utility Software

1.6 Impact of technology on society

o Ethical issues

Legal issues

o cultural issues

o Environmental issues

Privacy issues

Legislation relevant to Computer Science

Data Protection Act 2018, Computer Misuse act 1990

Copyright Designs and Patent Act 1988

Software licences (i.e. open source and proprietary)

Written paper: 1 hour and 15

minutes

50% of total GCSE

80 marks

This is a non-calculator paper. All questions are mandatory.

This paper consists of multiplechoice questions, short response questions and extended response questions



Essential equipment:

Black pens.

Revision materials:

<u>SMART Revise</u>, <u>Craig & Dave videos YouTube</u>, Six-A-Day Algorithms <u>Free Resources - CSUK:ReviseCS</u>, Exam Question Bank on Teams, CGP Grade 9-1 GCSE Combined Science: OCR revision guides and workbooks. Revision resources on Teams, SharePoint and GCSEpod

Suggested revision activities:

Make mind maps, knowledge organiser, revision mats or flash cards for each topic. Answer practice exam questions and use mark schemes to check and correct your answers. There are practice questions and mark schemes on SharePoint. Log in to Smart Revise and GCSEpod and use the revision materials and online tests. You can also use Senecalearning.com, but ensure you select the right exam board and tier (OCR GCSE Computer Science).