

# OCR Computer Science J277 Paper 1 Advanced Checklist

Link to spec: <https://tinyurl.com/mptbe92n>

## J277/01 Computer Systems

Specification Reference	Name of topic	Sub part of topic directly assessed
1.1 Systems architecture	1.1.1 Architecture of the CPU	The purpose of the CPU  Common CPU components and their features.  Von Neumann architecture
1.2 Memory and storage	1.2.1 Primary storage (Memory)	<i>All subtopics to be covered</i>
	1.2.2 Secondary storage	<i>All subtopics to be covered</i>
	1.2.3 Units	The units of data storage
	1.2.4 Data Storage	Numbers.  Characters.  Images.  Sound.
	1.2.5 Compression	<i>All subtopics to be covered</i>
1.3 Computer networks, connections and protocols	1.3.1 Networks and topologies	Factors that affect the performance of networks.  The hardware needed to connect stand-alone computers into a Local Area Network.  The Internet as a worldwide collection of computer networks.
	1.3.2 Wired and wireless networks, protocols and layers	Modes of connection.  Encryption.  IP addressing and MAC addressing.  Standards.  Common protocols.
1.4 Network security	1.4.2 Identifying and preventing vulnerabilities	Common prevention methods.
1.6 Ethical, legal, cultural and environmental impacts of digital technology	1.6.1 Ethical, legal, cultural and environmental impact	Impacts of digital technology on wider society.  Legislation relevant to Computer Science.