

What is the job of the MAR?	
A benefit of having more cache	
Three factors that affect the CPU's performance	
Role of the CU	
What does the ALU do?	
Name two topologies	
What is a peer to peer network?	
What is a LAN?	
Name an example of a network	
What is the role of a server in a server-client model?	
What is the job of a firewall?	
What is a way to control user's access?	
What does anti-malware stop?	
1.) What is LAN & WAN stand for?	= Local Area Network & Wide Area Network
2.) What is SSID & What does it stand for?	=Service Set Identifier, It is a technical term for a network name.
3.) What is WPS & What does it stand for?	=Wi-Fi Protected Setup, A wireless network security standard that tries to make a connection between a router and a wireless device.
4.) What is WPA & What does it stand for?	=WiFi Protected Access, A security protocol to secure wireless computer networks
5.) What does CPU stand for?	=Central Processing Unit
6.) What is a network?	
7.) What is a HTTP Protocol	
8.) What is the difference between a White Hat & a Black Hat Hacker	
9.) What is a Graphical User Interface	
10.) What is a Command Line Interface	
11.) What is a Menu Interface	
12.) Explain what "SpDuPoReCoCa" is	
13.) What DDoS mean	
14.) What is Penetration Testing	
15.) What is the term used when a hacker systematically checks all passwords until he finds the correct one?	
16.) State one principle of the Data Protection Act	
What does CPU stand for? What are the different parts of the CPU?	
What is cache and what is its job?	
What is the ALU and what is its job?	
What is the job of the CPU?	
Name different types of network topologies? What is a peer to peer network?	
What is a LAN?	
What it a CAN?	
What is a WAN?	
Define the term hardware. [1 mark]	Computer hardware is the collection of physical parts of a computer system. This includes the computer case, monitor, keyboard, and mouse
* Explain how main memory is used during the fetch-execute cycle. [4 marks]	During the fetch execute cycle, the computer retrieves a program instruction from its memory. It then establishes and carries out the actions that are required for that instruction.
* State two other ways of improving the performance of a CPU. [2 marks]	cores clock speed

	cache size processor type
* What does 'volatile' mean for a computer's memory?	It is used to describe memory content that is lost when the power is interrupted or switched off. Your computer's ordinary memory (or RAM) is volatile memory.
* How does data travel between the processor and the computer's RAM?	RAM is used for storing important data temporarily. ... And CPU are way faster than RAM but has no data storage.
* What is a protocol?	It is a set of rules that governs data communication
* What is a network?	It is a set of devices connected by communication links. A node can be a computer or any other device capable of sending and/or receiving data generated by other nodes on the network.
* What are the important topologies for networks	BUS topology STAR topology RING topology MESS topology
* What is a topology?	Topology of a network is defined as the geometric representation of the relationship of all the links and linking devices (node) to one another.
* What do you mean by Bluetooth?	It is a wireless LAN technology designed to connect devices of different functions such as telephones, notebooks, computers, cameras
* What is a passive attack?	A passive attack is a network attack in which a system is monitored and sometimes scanned for open ports and vulnerabilities
* What is a denial of service attack?	It occurs when multiple systems flood the bandwidth or resources of a targeted system, usually one or more web servers. Such an attack is often the result of multiple compromised systems (for example, a botnet) flooding the targeted system with traffic.
* What is a firewall?	A firewall is a system designed to prevent unauthorized access to or from a private network.
* What is the purpose of fake emails?	Most email spam messages are commercial in nature. Whether commercial or not, many contain disguised links that appear to be for familiar websites but in fact lead to phishing web sites or sites that are hosting malware.
What does cpu stand for?	
2. What is the task of the cpu	
3. What is the minimum amount of processors in a cpu	
4. Name a type of network structure	
5. Bring up one pro about your chosen network	
6. Name a security software on a computer	
7. Name 2 types of data representation	
8. Name 3 types of malicious software	
9. Name 2 types of hacker	
10. Name 3 types of testing	
11. Name 2 types of software	
12. State difference between centralised and distributed network structure	
What hardware defines a computer?	Answer: CPU and GPU
2) What does CPU Stand for?	Answer: Central Processing Unit
3) What is known as "the brain" of the computer?	Answer: CPU

4) What are the benefits of a multiple core CPU?	Answer: The computer is faster and can hold more data at one time
5) What is the closest storage store to the CPU?	Answer: Cache
1) What are networks used for:	Answer: Used for printers, mobile devices etc to access the internet
2) What does LAN Stand for?	Answer: Local Area Network
3) What are the 3 main types of network connection types?	Answer: BUS, STAR, and MESH
4) How does packet switching work?	Answer: When a file is sent, it is split up into tiny packets then sent via the fastest way to then be re-encrypted into a file.
5) What does HTTP stand for:	Answer: Hyper Text Transfer Protocol
1) What is a malicious software:	Answer: Code designed for malicious reasons
What does CPU stand for?	
What does MAR stand for?	
What is the fetch, decode execute cycle?	
What is a core?	
What does the alu stand for?	
What does lan stand for?	
Wham does wan stand for?	
What is a bus network?	
What is a star network?	
What are the advantages and disadvantages of wireless network?	
What is DDoS-ing?	
What is the purpose of a firewall?	
What is malware?	
What is cryptographic software?	
What does CPU stand for?	
2. What does the CPU process?	
3. What are the CPU's three main parts?	
4. What does ALU, MAR and MDR stand for and do?	
5. What cycle does the CPU do?	
1. What is LAN and WAN and TAN?	
2. Explain star and mesh topology?	
3. What effects performance of Networks?	
4. How does fiber-optic work?	
What is a processor (CPU)?	
* What is a core?	
* What does ALU stand for?	
* What does MDR stand for?	
* What is the fetch, decode, execute cycle?	
* What does LAN stand for?	
* What does WAN stand for?	
* What is a bus network?	
* What is the star network?	
* What are the advantages and disadvantages of wireless networks?	
* What is D-DoSing?	
* What is the purpose of firewall?	
* What is male-ware?	
* What is cryptographic software?	
* What are passwords used for?	
What 3 things do a CPU do?	
What 3 main parts are found in a CPU?	

What 3 main things affect the performance of a CPU?	
What does a CPU stand for?	
What kind of processors do tablets use?	
What does LAN and WAN mean?	
What is network topology?	
Can you name a network topology?	
What 2 protocols work together to send data?	
In what form is data sent across the internet?	
What computer related act was passed in in 1990?	
What are the 8 Rs?	
What is a backdoor?	
What is a program called that protects your computer?	
Name another security feature of a computer?	
What does an OS stand for?	
What do drivers do?	
What do utility programs do?	
What is defragging?	
Why is file managing important?	
What is ASCII used for?	
How many different ways can you represent data as numbers and letters?	
Convert 72 to hexadecimal	
How many nibbles are there in a byte?	
How is data stored in a transistor with the charges?	
What are the 2 main components inside the CPU?	
a. The ALU and the CU	
2) What does 'CPU' stand for?	a. Central Processing Unit
3) What is the cycle that the CPU does?	a. Fetch, Decode, Execute
4) What is closest storage type to the CPU?	a. The cache
5) What is clock speed?	a. Clock speed is the maximum speed that the CPU can work at.
1) What are the 2 most used network types?	a. LAN (Local Area Network) WAN (Wide Area Network)
2) What are those network types used for?	a. LAN for small areas like a small building b. WAN for a large area like multiple buildings
3) What are the 3 main network connection types?	a. BUS, STAR and MESH
4) What is packet switching?	a. When data is sent through routers it is sent in packets so that it doesn't get stuck on the way to it's destination.
5) What does 'HTTP' stand for?	a. Hyper Text Transfer Protocol
1) What is a Trojan Horse attack?	a. When malicious software is implemented into software but gets in by pretending to be non-malicious software.
What does CPU stand for?	Central Processing Unit
* Out of what material are computer chips made?	Silicon
* What does ROM stand for?	Read Only Memory
* What does RAM stand for?	Random Access Memory
* What's a CPU's clock speed?	The rate at which it executes instructions
* What is a Network?	A network is a set of devices connected to each other using a physical transmission medium
* What is a Node?	Two or more computers are connected directly by an optical fibre or any other cable. A node is a point where a connection is established

* What is Network Topology?	Network Topology is a physical layout of the computer network and it defines how the computers, devices, cables etc. are connected to each other
* What are Routers?	The router is a network device which connects two or more network segments. The router is used to transfer information from the source to destination
* What is a Firewall?	Firewall is a network security system that is used to protect computer networks from unauthorized access. It prevents malicious access from outside to the computer network
* Why is Python utilized for hacking?	Most broadly utilized scripting language for Hackers is Python. Python has some very critical highlights that make it especially valuable for hacking, most importantly, it has some pre-assembled libraries that give some intense functionality
* What is a firewall?	A firewall could be a device that allows/blocks traffic as per outlined set of rules. These are placed on the boundary of trusted and untrusted networks
* What is a black hat hacker?	Black hat hackers are those who hack without authority
* What is a white hat hacker?	White hat hackers are authorised to perform a hacking attempt under signed NDA
* What is a gray hat hacker?	Grey hat hackers are white hat hackers which sometimes perform unauthorised activities
* What is antivirus software?	Antivirus software helps to protect a computer system from viruses and other harmful programs
* Why should you back up software?	Backing up software helps in the creation of a backup of the files on your computer
* What is a device driver?	A device driver is a computer program that controls a particular device that is connected to your computer
* What is software?	Software is a generic term for an organized collection of computer data and instructions
* How does your computer get viruses?	Software is a generic term for an organized collection of computer data and instructions
* Convert 200 (in decimal) to binary.	Answer 11001000
* Convert 0b1010010101101001 to hexadecimal.	Answer A569
* How is data represented in a computer?	Answer Bits
* What values can each bit represent?	Answer 0 or 1
* How can you extend regular ASCII to represent more character values?	Answer Have it represent 8 bits or 256 characters
Name all three registers in the CPU?	MAR, MDR, Acc
Where are the calculations made in the CPU?	ALU
What would increase performance of the CPU?	More cores, clock speed, cache, how the cores are controlled
What is CPU clock speed and how is it measured?	How many fetch decode execute cycles per second are done in CPU, Hz
What is the memory in the CPU?	Cache
Which network topology has all the nodes connected to each other?	Mesh
Which network topology has all the nodes connected to the server?	Star
What does LAN stand for?	Local Area Network
How are each of the nodes in a network uniquely identified?	IP Addresses
What are the factors that affect network performance?	Type, topology, transmission medium, hardware

What malware goes from one device to another?	Worm
What is the main flaw in network security?	PEBKAC
What do firewalls do?	Stop unauthorised access to files
When is encryption usually used?	In transfer
Why is anti-malware ineffective when not updated regularly?	It can't stop new malware, it only detects known malware
What are an Operating Systems main functions?	Memory, Users, Peripherals, Files
What are three common peripherals?	Keyboard, Mouse, Printer
How does the OS act like?	Communication layer between user and computer
Why is file handling important?	Makes sure there is enough space and it organised for quick access
Why is compression used by the OS?	To decrease the size of files
How is ASCII used?	It places a binary value to every character on keyboard
What are the number bases of binary, denary and hexadecimal?	2,10,16
How can a black and white image be represented in binary?	0=white 1=black
What is a character set?	Amount of characters that can be represented
What happens to a binary number if it is shifted to the left?	It doubles
What does the cpu mean?	Central processing unit
2. What cycle is done in the cpu?	Fetch decode execute cycle
3. What two component are in the cpu?	Control unit and the arithmetic logic unit (ALU)
4. Where is the CPU Located?	Inside the computer case on the motherboard.
5. What bits can a cpu be?	32 and 64 bits
What is lan, wan and man	Local area network, Wide area network and Metropolitan area network.
2. Give an example of LAN.	School / Office / Home network.
4. How are LAN connected to each other	Ethernet cables
5. Which one is the biggest network	WAN
What is cache?	Quick access memory in the CPU
How does the clock speed change the performance of a processor?	Increases the amount of processes the processor can carry out each second
What is the Fetch, Decode, Execute cycle?	The process that the CPU uses to retrieve and execute instructions.
What is the MAR and what does it do?	Memory address register- stores location for data
What is the Acc and what does it do?	Accumulator- stores results of ALU
What is the acronym describing the benefits of a network?	CAMPUSF
What does PAN stand for?	Personal area network
What is a server-client network model?	A server and will feed the clients the data
What is network topology?	The shape of the network (bus, star...)
What is a virtual network?	Network created through software
Why are user access levels useful?	They let system administrator make a hierarchy of the users
What is encryption?	Changing data so that it cannot be read when it is being transmitted
What is anti-malware software?	Software that protects against infections
What is a firewall?	System that monitors incoming and outgoing data
Why are passwords useful?	They allow prevention to the network based on whether you know the password or not.
What is a peripheral?	External hardware connected to a computer
How do magnetic hard disks work?	They spin and the data is read off them
What is Graphical user interface?	User interface designed to be easy for everyday users
Give 3 examples of a peripheral.	Keyboard, mouse and headphones

What is command-line interface?	Text based piece of software then the computer can work from
What is ASCII?	American Standard Code for Information Interchange
How is Unicode different to ASCII?	Uses 16 bits rather than 8
What happens when you shift all of the digits in a binary number to the left?	The number doubles
What is text representation?	Where you have a number that represents each character
Does binary shift have a possibility of overflow?	Yes- if it is shifted too far
In which CPU component are calculations carried out?	
What is the small area of very fast memory within the CPU known as?	
Describe the control unit.	
Name two registers within the von Neumann CPU model.	
What is CPU clock speed measured in?	
What does LAN stand for?	
Name three elements that can affect network performance.	
What does the abbreviation MAC stand for?	
Name three types of wireless connectivity.	
List four network topologies.	
What is a self-replicating form of malware called?	
What does the abbreviation DoS stand for?	
Why must anti-malware be regularly updated?	
What is hardware and software designed to control the transmission of data referred to as?	
Name two dangers of a poor network policy.	
What three elements does an operating system link?	
List four examples of computer peripherals.	
What is file compression?	
What is a device driver?	
What is the rearranging of files to speed up access and reduce size called?	
What is the number base for denary, binary and hexadecimal data representations?	
What is the highest 8-bit binary value and why?	
What is the abbreviation ASCII short for?	
Name a character set that is designed to represent all languages.	

Convert 01010101 into hexadecimal.