

AQA Computer Science A Level

4.9.3 The Internet

Flashcards

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Define the Internet



Define the Internet

A network of interconnected computer networks which uses an end-to-end communication protocol



Which type of malware requires a host file: worms, Trojans or viruses?



Which type of malware requires a host file: worms, Trojans or viruses?

Viruses



Which of these tables could be a DNS table?

1

DNS Table	
Domain Name	IP address
physicsandmathstutor.com	85.221.23.5
pmt.education	199.145.65.77
pmtcourses.com	65.89.152.37

2

DNS Table	
Packet	Recipient Address
1	41.47.142.112
2	8.57.105.88
3	84.95.149.3

3

DNS Table	
Device	IP Address
00-14-22-01-23-45	45.12.25.85
58-98-12-32-45-82	56.23.85.152
02-87-54-89-11-14	55.132.114.6



Which of the tables could be a DNS table?

1



What is an internet service provider?



What is an internet service provider?

A company that provides its customers with access to the Internet



For what do the letters TTL stand?



For what do the letters TTL stand?

Time to live



What name is given to the process of a packet moving from one router to another?



What name is given to the process of a packet moving from one router to another?

Hop



Name **three** of the primary components of a packet



Name **three** of the primary components of a packet

Three of:

1. Sender's address
2. Receiver's address
3. Packet contents
4. Time to live (TTL)
5. Sequence number



What device is used between networks that use different protocols?



What device is used between networks that use different protocols?

Gateways



It what type of packet control is the content of a packet examined by a firewall: packet filtering or stateful inspection?



It what type of packet control is the content of a packet examined by a firewall: packet filtering or stateful inspection?

Stateful inspection



For what do the letters URL stand?



For what do the letters URL stand?

Uniform resource locator



List two benefits that digital signatures bring to asymmetric encryption



List two benefits that digital signatures bring to asymmetric encryption

Two of:

1. Verifies that the message has come from the sender and not an imposter
2. Verifies that the message has not been tampered
3. Verifies that the message has not been corrupted



Which type of malware is disguised as a benign file: worms, Trojans or viruses?



Which type of malware is disguised as a benign file:
worms, Trojans or viruses?

Trojans



For what do the letters TLD stand?



For what do the letters TLD stand?

Top-level domain



In what type of encryption do the sender and receiver share the same private key?



In what type of encryption do the sender and receiver share the same private key?

Symmetric encryption



How are different continents connected to the Internet?



How are different continents connected to the Internet?

By underwater cables



For what do the letters FQDN stand?



For what do the letters FQDN stand?

Fully qualified domain name



Which organisations are responsible for the allocation of IP addresses?



Which organisations are responsible for the allocation of IP addresses?

Internet registries



What name is given to servers that sit between a public network and a private network?



What name is given to servers that sit between a public network and a private network?

Proxy servers



Using asymmetric encryption, a message is encrypted using the recipient's public key. Which key can now decrypt the message?



Using asymmetric encryption, a message is encrypted using the recipient's public key. Which key can now decrypt the message?

The recipient's private key



Name three pieces of information contained in a digital certificate



Name three pieces of information contained in a digital certificate

Three from:

1. a serial number
2. the owner's name
3. an expiry date
4. the owner's public key
5. the certificate authority's digital signature

