Limitations of the Internet

Total points 6

1. True or false: The Internet is the World Wide Web.

1 / 1 point

○ TRUE

⦿ FALSE

✓ **Correct**
Correct! The Internet is mistakenly referred to as the World Wide Web, but it's just the physical connection of computers and wires around the world. The Web is the information on the Internet.

2. What is the fundamental protocol that the Internet uses today?

1 / 1 point

⦿ TCP/IP

○ HTTP

○ DHCP

○ FTP

✓ **Correct**
Nice work! The TCP/IP protocol is what allowed computers to share information outside their network, which stemmed the creation of the Internet as we know it today.

3. Free text: In what other ways has the Internet changed the way society functions?

1 / 1 point

Help us to transmit information more efficiently.

✓ **Correct**
It's crazy to think about how the Internet has completely changed our lives. Thank you for submitting your response to this prompt. In the future, you may even see the Internet change things that we have yet to imagine.

4. True or false: You should only worry about computer security if you work in a computer security role.

1 / 1 point

○ TRUE

⦿ FALSE

✓ **Correct**
Well done, you! Computer security affects everyone whether it's in your personal life or work life. You and everyone around you should exercise good computer security practices.

5. There are 4 bytes in an IPv4 address. What is the highest decimal value you can have for one byte?

1 / 1 point

○ 128

● 255

○ 256

○ 512

✓ **Correct**
Great job! There are 256 available values in a byte with decimal values ranging from 0 to 255.

6. Which of the following protocols is the primary infrastructure that creates the Internet?

1 / 1 point

○ DNS

○ NAT

○ HTML

● TCP/IP

✓ **Correct**
Nice work! The TCP/IP protocol is what allowed computers to share information outside their network, which stemmed the creation of the Internet as we know it today.

Networking

Latest Submission Grade 100%

1. Question

Which of the following devices are used in networking? Check all that apply.

- ☐ TCP
- ☑ Switches

  ✓ **Correct**
  Wohoo! These are all physical devices used in networking.

- ☑ Hubs

  ✓ **Correct**
  Wohoo! These are all physical devices used in networking.

- ☑ Routers

  ✓ **Correct**
  Wohoo! These are all physical devices used in networking.

⤢ **Expand**

✓ **Correct**
Great, you got all the right answers.

2. Question

1 / 1 point

What are some of the ways we can resolve IPv4 address shortages? Check all that apply.

☐ Autonomous Systems

☐ Border Gateway Protocol

☑ Using IPv6 addresses

✓ **Correct**

Great job! Using NAT and IPv6 addresses, we can resolve the shortcomings of IPv4 addresses.

☑ Network Address Translation

✓ **Correct**

Great job! Using NAT and IPv6 addresses, we can resolve the shortcomings of IPv4 addresses.

⤢ **Expand**

⊘ **Correct**

Great, you got all the right answers.

3. Question

1 / 1 point

Which network protocol is used to route IP addresses?

○ TCP

○ UDP

◉ IP

○ ICMP

⤢ **Expand**

⊘ **Correct**

You got it! IP is used to route IP addresses in a network.

4. Question

1 / 1 point

What protocol allows us to use a domain name like google.com instead of an IP address?

○ NAT

○ TCP/IP

◉ DNS

○ ICMP

⤢ **Expand**

✓ **Correct**
Excellent! DNS allows us to use easy-to-remember names as opposed to IP addresses.

5. Question

1 / 1 point

Which one of these can connect directly to the Internet?

○ Internet users

◉ Servers

○ Clients

○ Packets

⤢ **Expand**

✓ **Correct**
You nailed it! Computers (called servers) connect directly to the Internet.

6. Question

1 / 1 point

Which protocol is used to handle delivery of information from one network to another?

○ File Transfer Protocol

○ Hyper Text Transfer Protocol

○ Internet Protocol

◉ Transmission Control Protocol

⤢ **Expand**

✓ **Correct**
You nailed it! The Transmission Control Protocol or TCP is a protocol that handles reliable delivery of information from one network to another.

7. Question

You're browsing the Web, and type in www.Coursera.com in the address line. Instead of the website, an error screen appears. You type in 54.174.155.206, and the Coursera website comes up. What's the most likely reason for this?

○ Address line is for the IP address only, not the domain name.

◉ There's a problem in your network's DNS configuration.

○ Web addresses must be entered in lowercase.

○ There's a problem with your Internet connection.

⤢ **Expand**

✓ **Correct**
Well done! If you're able to access a website by its IP (Internet Protocol) address, but not its human-readable domain name, then there's a good bet that there's a problem somewhere in the DNS (Domain Name System) configuration your network is using.

8. Question

What was the main limitation of computer networking that the invention of the World Wide Web solved in the 1990s?

◉ People could only receive the information in the form of text.

○ People around the world could not send data to one another.

○ The TCP/IP protocol could only be used in universities, governments, and businesses.

○ Networks couldn't talk to each other.

⤢ **Expand**

✓ **Correct**
You nailed it! The World Wide Web utilized different protocols, not just text, for displaying information in web pages.

9. Question   1 / 1 point

You need to update your router settings, so you log into the administration panel, whose
Internet Protocol (IP) address is 192.168.0.1. Which IP version is this?

○ IPv1

◉ IPv4

○ IPv2

○ IPv6

⤢ Expand

⊘ **Correct**
You got it! IPv4 (Internet Protocol version 4) is an address that consists of 32 bits separated into 4 groups.
This means that each group can have values from 0 to 255, making 192.168.0.1 a valid IPv4 address.

10. Question   1 / 1 point

What are some examples of IoT (Internet of Things)? Check all that apply.

☐ Teachers who post assignments for their students on the school website

☑ Thermostats that turn off the air conditioning when you leave the room

✓ **Correct**
You nailed it! The concept of the Internet of Things is to have regular devices, like
refrigerators and thermostats, connected to the Internet and perform tasks automatically.

☐ An online car dealership that can provide complete car history using the vehicle identification
number

☑ Refrigerators that keep track of the food and notify you when to buy more

✓ **Correct**
You nailed it! The concept of the Internet of Things is to have regular devices, like
refrigerators and thermostats, connected to the Internet and perform tasks automatically.

⤢ Expand

⊘ **Correct**
Great, you got all the right answers.