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**Time taken** 1 min 48 secs

**Grade** 8.00 out of 10.00 (80%)

## Question 1

Correct

Mark 1.00 out of 1.00

The use of \_\_\_\_\_ lets the base station receive CDMA messages from unsynchronized mobile phones.

Select one:

- ☐ a. large antennas
- ☐ b. expensive digital filter components
- ☐ c. sophisticated software algorithms
- ☒ d. pseudorandom sequences ✓

Your answer is correct.

## Question 2

Correct

Mark 1.00 out of 1.00

All else being equal, the data rate achievable with a radio signal is proportional to:

Select one:

- ☐ a. the signal power
- ☐ b. the distance to the receiver
- ☒ c. the width of the frequency band ✓
- ☐ d. the number of sub-channels

Your answer is correct.

**Question 3**

Correct

Mark 1.00 out of 1.00



Ethernet-like collision detection is no longer feasible over radio communications:

Select one:

- ☒ True ✓
- ☐ False

**Question 4**

Correct

Mark 1.00 out of 1.00

The telephone system is tightly intertwined with (wide area) computer networks. The limiting factor for networking purposes turns out to be:

Select one:

- ☐ a. the trunk network bandwidth
- ☐ b. the government regulations
- ☒ c. "the last mile" over which telephone customers connect ✓
- ☐ d. the high cost of leasing phone lines

Your answer is correct.

**Question 5**

Correct

Mark 1.00 out of 1.00

Bluetooth is a low-power network; for many applications the working range is about:

Select one:

- ☒ a. 10 m ✓
- ☐ b. 50 m
- ☐ c. 1 m
- ☐ d. 100 m

Your answer is correct.

**Question 6**

Correct

Mark 1.00 out of 1.00



Wi-Fi Link-Layer ACKs contain the following information:

Select one:

- ☐ a. A timestamp
- ☐ b. A sequence number
- ☐ c. The number of bytes which are being acknowledged
- ☒ d. None ✓

Your answer is correct.

**Question 7**

Correct

Mark 1.00 out of 1.00

The preferred Wi-Fi encryption standard is Wired-Equivalent Privacy, or WEP.



Select one:

- ☐ True
- ☒ False ✓

**Question 8**

Incorrect

Mark 0.00 out of 1.00

For the Internet Checksum, the value 0000 in the checksum represents:

Select one:

- ☐ a. Data corruption
- ☐ b. No data in the packet
- ☐ c. No checksum calculated
- ☒ d. No error detected ✗

Your answer is incorrect.

**Question 9**

Incorrect

Mark 0.00 out of 1.00



Bandwidth delay is more significant than propagation delay within a small LAN.

Select one:

- ☐ True
- ☒ False **✖**

**Question 10**

Correct

Mark 1.00 out of 1.00

If Wi-Fi error rates or collision rates are high, a sender can send a large packet as multiple fragments, each receiving its own link-layer ACK.

Select one:

- ☒ True **✔**
- ☐ False