Exercise 4 (Chap 4)

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每个题目有10分，最多可以尝试3次，以最后一次回答为准，客观题答完后会自动批改，并且给出标准答案。题目类型为Essay的不会自动批改，分数由老师阅后再给

#1 Points possible: 10

ch4-2. A group of N stations share a 56-kbps pure ALOHA channel. Each station outputs a 1000-bit frame on an average of once every 100 sec, even if the previous one has not yet been sent (e.g., the stations can buffer outgoing frames). What is the maximum value of N?

A: 1030

#2 Points possible: 10

Q. What is the baud rate of the standard 10-Mbps Ethernet?

A. 20 Mbaud

#3 Points possible: 10

Q. Consider building a CSMA/CD network running at 1 Gbps over a 1-km cable with no repeaters. The signal speed in the cable is 200,000 km/sec. What is the minimum frame size?

A. 10000 bits

#4 Points possible: 10

The reason for binary exponential backoff in the classical Ethernet is that_____

- this algorithm is simple
- this algorithm is fast
- (•) this algorithm is adaptive to network load
- this algorithm is scalable to network size

#5 Points possible: 10

When binary exponential backoff is used, a random number between 0 and _____ is chosen and that number of slots is skipped

- 511
- (•) 1023
- 2047
- 4095

#6 Points possible: 10

A network interface card mainly works at the _____ layer(s)

- (•) physical and data link
- ( ) data link and network
- ( ) physical and network
- ( ) data link and transport

#7 Points possible: 10

Which is not one of the important functions provided by bridges?

- ( ) reducing the collision domain
- ( ) increasing the data rate
- ( ) increasing the length of domain
- (•) reducing the broadcast domain

#8 Points possible: 10

There is a 10 Mbps Ethernet switch with 10 ports each of which is connected to a single computer. Then every computer’ s data rate is _____Mbps.

- ( ) 1
- ( ) 2
- (•) 10
- ( ) 100

#9 Points possible: 10

_____ work at the physical layer while _____ work at the data link layer.

- ( ) Hubs, routers
- (•) Hubs, switches
- ( ) Bridges, routers
- ( ) Repeaters, hubs

#10 Points possible: 10

What kind of media used by 1000Base-F network?

- Coaxial Cable
- Twisted Pairs
- Fiber Optics
- Power Lines
