

# HW2 - Computer Network

Yiping Deng

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## 1 Problem 2.1

### 1.1 a)

Root Bridge: **B1**  
Root Port:

Table 1: Root Port

Bridge	Port
B2	P2.2
B3	P3.2
B4	P4.2
B5	P5.1
B6	P6.1
B7	P7.1
B8	P8.2

Designated Port:  
Blocked Port:

Table 2: Designated Port

Segment	Port
A	P4.1
B	P1.1
C	P2.1
D	P1.2
E	P2.3
F	P3.3
G	P6.2
H	P4.3
I	P7.2
J	P1.3
K	P8.3
L	P2.4

Table 3: Blocked Port

Bridge	Port
B3	P3.1
B5	P5.2, P5.3
B6	P6.3
B8	P8.1

## 1.2 b)

Root Bridge: B2

Table 4: Root Port  
Bridge Port

B3	P3.2
B4	P4.1
B5	P5.1
B6	P6.1
B7	P7.1
B8	P8.1

Table 5: Designated Port

Segment	Port
A	P3.1
B	P4.2
C	P2.1
D	P2.2
E	P2.3
F	P3.3
G	P6.2
H	P4.3
I	P5.3
J	P8.2
K	P6.2

Table 6: Blocked Port

Bridge	Port
B5	P5.2
B7	P7.2
B8	P8.3

## 2 Problem 2.2

### 2.1 a)

- packets: 106280
- bytes: 19689056
- endpoint: 52837, 6826k bytes are broadcasted
- broadcast percentage: 49.7149% by packets, 34.6690% by bytes

### 2.2 b)

- sending(source): 00:0c:30:80:d5:55
- destination: 01:80:c2:00:00:00
- how frequently are PDUs sent: 2 seconds / packets
- root bridge identifier: 24576 / 5 / 00:0c:30:80:d5:40, with bridge priority 24576, address: 00:0c:30:80:d5:40

### 2.3 c)

Yes, apart from STP protocol, there are:

- Microsoft Windows Browser Protocol
- Cisco Discovery Protocol
- Dynamic Trunk Protocol
- IPX Routing Information Protocol
- Service Advertisement Protocol
- NetBIOS over IPX
- Zone Information Protocol

which uses LLC.