HW7 Networks

P14

a) Sub1: 192.168.1.XXX
Sub2: 192.168.2.XXX
Sub3: 192.168.3.XXY

b) MAC Address

P15 a) No, E can check subnet prefix of Host F

b) No, Not on same LAN

c) Switch S1 will broadcast the ethernet frame via both interfaces, So, yes

P21 (ii) source MAC: 33-33-33-33-33-33
Dest MAC: SS-SS-SS-SS-SS-SS
Source IP: 122.222.222.062
Dest IP: 122.222.222.063

(i) MAC: 00-00-00-00-00-00
MAC: 22-22-22-22-22-22
IP: 122.222.222.001
IP: 122.222.222.002

(iii) MAC: 88-88-88-88-88-88
MAC: 99-99-99-99-99-99
IP: 133.333.333.002
IP 133.333.333.003

P22

a) Source MAC : 00-00-00-00-00-00
MAC : 55-55-55-55-5555
Source : 111, 111.111.001
Dest : 133, 333.333.003

b) Source : 00-00-00-00-00-00
Dest : 55-55-55-55-55-55
Source : 111, 111, 111.001
Dest : 133, 333. 337.003

c) Source : 88-88-88-88-88-88
Dest : 99-99-99-99-9999
Source : 111. 111, 111 .001
Dest 133. 333, 333 .003

P26

Action	Switable State	forward to
B → E	learns interface mac of B	A, C, D, E, F
E Replies ↘ B	learns MAC of E	B
A → B	learns MAC of A	B
Replies B → A	Stays same	A