LAN Mode Lab Test

Q1

VLAN	CIDR	1st IP	Last IP	BA	SM
10	/25	192.168.1.1	192.168.1.126	192.168.1.127	255.255.255.128
20	/27	192.168.1.129	192.168.1.158	192.168.1.159	255.255.255.224
30	/29	192.168.1.161	192.168.1.166	192.168.1.167	255.255.255.248

32 - 25
= 7

192.168.1 . 0000 0000

‾1111‾ ‾1111‾ . ‾1111‾ ‾1111‾ . ‾1111 1111‾ . 1000 0000

32 - 27
= 5

192.168.1. 100 0 0000

1110 0000
25 9
27

192.168.1.101 0 0000

1111 1
29

Q2

b)

Device	Port	VLAN	PC Interface	IP	SM	Default Gateway
SW1	F90/22	All	N.A	NA	NA	NA
SW1	F90/23	All	N.A	NA	NA	NA
SW1	F90/24	All	N.A	NA	NA	NA
SW2	F90/25	10 (Staff)	PC1-NIC	192.168.1.2 /25		192.168.1.1
SW2	F90/6-10	20 (Student)	PC2-NIC	192.168.1.130 /27		192.168.1.129
SW2	F90/15-17	30 (Guest)	PC3-NIC	192.168.1.162 /29		192.168.1.161
SW3	F90/2-5	10 (Staff)	PC4-NIC	192.168.1.3 /25		192.168.1.1
SW3	F90/6-10	20 (Students)	PC5-NIC	192.168.1.131 /27		192.168.1.129