



**DEPARTMENT OF COMPUTER SCIENCE &
ENGINEERING**

Course Title : Computer networks lab

Course Code : CSE 320

Experiment Name : VLSM

Submitted To

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Lecturer

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Section: A1

Date of Submission : 01-10-2022

For CSE

Base network/ Network address : 10.10.0.0/21

First host : 10.10.0.1

Subnet Mask : 255.255.248.0 (for 21 bit network)

Last host : 10.10.7.254

Broadcast address : 10.10.00000 111.11111111 (11 bit host) = 10.10.7.255

For CE

To get the network address we add 1 to the binary form of CSE's broadcast address.

Network address : 00001010.00001010.00000 111.11111111 +1 = 00001010.00001010.00001 000.00000000

= 10.10.8.0/21

First host : 10.10.8.1

Subnet Mask : 255.255.248.0 (for 21 bit network)

Last host = 10.10.15.254

Broadcast address : 00001010.00001010.00001 111.11111111 (11 bit host) = 10.10.15.255

For EEE

To get the network address we add 1 to the binary form of CE's broadcast address.

Network address : 00001010.00001010.00001 111.11111111 + 1 = 00001010.00001010.00010 000.00000000

= 10.10.16.0/21

First host : 10.10.16.1

Subnet Mask : 255.255.248.0 (for 21 bit network)

Last host : 10.10.23.254

Broadcast address : 00001010.00001010.00010 111.11111111 (11 bit host) = 10.10.23.255

PHARMA

Network address : = 10.10.24.0/22

First host : 10.10.24.1

Subnet Mask : 255.255.252.0 (for 22 bit network)

Last host : 10.10.27.254

Broadcast address : 00001010.00001010.00000011.11111111 (11 bit host) = 10.10.27.255

BBA

Network address : = 10.10.28.0/25

First host : 10.10.28.1

Subnet Mask : 255.255.255.128 (for 25 bit network)

Last host : 10.10.255.127

Broadcast address : 00001010.00001010.00000000.01111111 (11 bit host) = 10.10.255.128

ENG

Network address : = 10.10.255.128/26

First host : 10.10.255.129

Subnet Mask : 255.255.255.64 (for 25 bit network)

Last host : 10.10.255.192

Broadcast address : 00001010.00001010.00000000.00111111 (11 bit host) = 10.10.255.64

