

# WORKSHEET - 3

1. B → 2

Data should be transmitted at the rate of 500 mbps transmit time = 2 propagation time.

$$\Rightarrow 10000 / (500 \times 1000000) \quad L = 2 * \text{length} / 2000000$$

$$\Rightarrow \text{Length} = 2 \text{ km (mass)}$$

SCB) 2km.

2. 255.255, 255.254

A's IP address      10      105      1      01110001

Subnet      255      255      255      11100000

O/P network 1      10      105      1      0110000

B's IP address      10      105      1      01011011

Subnet      255      255      255      11100000

O/P network 2      10      105      1      01000000

O/P network 1 = 10.105.1.196

O/P network 2 = 10.105.1.64.

3. d) 128.8.129.3 and 128.8.161.55

hence the given mask 255.255.31.0

is a class B network.

4. A) 2046

Subnetting a class B network address

mask = 255.255.248.0

Binary = 1111000.0000000

host subnet = 2046.

5. c) 16

Total 16 packet are sent the following

for a, sequence of event since go back-nearly control strategy is ever after a sent again.