Material :

09. Network Protocols

1. binusmaya – session 09 – Network Protocols

2. chap. 8, 18 - **Forouzan, B.A . (2010).TCP/IP Protocol Suite  . 04 th Edition**

3. DHCP <https://www.youtube.com/watch?v=RUZohsAxPxQ>

4. ARP <https://www.youtube.com/watch?v=cn8Zxh9bPio>

10. Transprot Layer

1. Binusmaya – session 10 – Transport Layer

2. PORT FORWARDING <https://www.youtube.com/watch?v=2G1ueMDgwxw>

3. chap. 13, 14, 15 - **Forouzan, B.A . (2010).TCP/IP Protocol Suite  . 04 th Edition**

4. NAT <https://www.youtube.com/watch?v=FTUV0t6JaDA>

5. TCP <https://www.youtube.com/watch?v=uwoD5YsGACg>

11. DNS (Domain Name System)

1. binusmaya – Session 11 – DNS

2. chap. 19 - **Forouzan, B.A . (2010).TCP/IP Protocol Suite  . 04 th Edition**

3. DNS - <https://www.youtube.com/watch?v=mpQZVYPuDGU>

12. Security

1. binusmaya – session 13 – security

3. chap. 29 - **Forouzan, B.A . (2010).TCP/IP Protocol Suite  . 04 th Edition**

2. ENCRYPTION <https://www.youtube.com/watch?v=ERp8420ucGs>

**Assignment :**

1. TCP and UDP (15 point)

a. Explain differences between TCP and UDP ?

b. What kind of application that must be using TCP? , Why ?

c. What kind of application that must be using UDP?, Why ?

2. There are 100 PC at one network, explain broadcast process if 10 PC want communicate to 10 PC (20 point)

A. When this network does not using DHCP / RARP protocol, only using ARP ?

B. When this network using DHCP ?

3. When 2 computer want communication (browsing) from domain BINUS.AC.ID to NUS.EDU.SG. Explain what process happened at layer 2 until layer 5 of TCP/IP. You Can using picture below.

a. explain how to find IP address of NUS.EDU.SG, using DNS Process (15 point)

b. explain what port address / number that must be used at layer 4, and why using that port number? (15 point)

c. explain how this data moving from one router to another router to connect from BINUS.AC.ID to NUS.EDU.SG (20 point)

d. explain how data can be transfer at layer 2 , mention about physical address. (15 point)

