

CONFIDENTIAL



UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER II
SESSION 2017/2018**

COURSE NAME : BASIC COMPUTER NETWORK
COURSE CODE : DAT 21203
PROGRAMME CODE : DAT
EXAMINATION DATE : JUNE / JULY 2018
DURATION : 2 HOURS 30 MINUTES
INSTRUCTION : ANSWERS ALL QUESTIONS.

TERBUKA

THIS QUESTION PAPER CONSISTS OF FIVE (5) PAGES

ABDUL MALIK JUDAN
CONFIDENTIAL
Jabatan Pendidikan
Pusat Pendidikan
Universiti Tun Hussein Onn Malaysia

- Q1**
- (a) Discuss **Three (3)** functions of Transport Layer. (6 marks)
 - (b) Discuss **Three (3)** benefits of peer-to-peer network. (6 marks)
 - (c) Differentiate between WAN and LAN topology. (4 marks)
 - (d) Draw a diagram that matches between TCP/IP and OSI layered architecture. (4 marks)
- Q2**
- (a) Identify the classes of the following IP addresses:
 - (i) 172.16.0.1/22
 - (ii) 192.168.0.1/24
 - (iii) 10.16.0.1/8
 - (iv) 198.168.0.1/25
 - (v) 175.16.0.1/16(10 marks)
 - (b) Determine the host range of the following IPs and netmasks.
 - (i) 191.168.1.10 255.255.240.0
 - (ii) 172.16.0.1 255.255.252.0(10 marks)
- Q3**
- (a) State switch configuration commands for the following requirements.
 - (i) Entering into a privilege mode (2 marks)
 - (ii) Enforcing console password **TERBUKA** (2 marks)
 - (iii) Showing VLAN configuration (2 marks)
 - (iv) Telneting a switch terminal that has 192.168.1.10/24 address. (2 marks)
 - (v) Activating a switch port on a router (2 marks)

- (b) **Figure Q3 shows** four routers used to inter-connects six LANs. LAN1 and LAN 6 are connected through multiple routers:
- (i) Identify the IP address for the R4 Fa0/0 interface. (2 marks)
 - (ii) Identify the IP address for the R4 Fa0/1 interface. (2 marks)
 - (iii) Identify the IP address for the R2 Fa0/0 interface. (2 marks)
 - (iv) State the command used to configure R2 router using RIP routing protocol so that LAN4 is able to connect the router R1 through LAN3 network. (2 marks)
 - (v) State the command used to configure R2 router using RIP routing protocol so that LAN6 is able to connect the router R1 through LAN5 network. (2 marks)
- Q4**
- (a) List **Five (5)** network topology. (5 marks)
 - (b) Draw the diagram of network topology in Q4(a) above. (10 marks)
 - (c) State **Three (3)** objectives of VLAN. (3 marks)
 - (d) List **Two (2)** services of presentation layer. (2 marks)

TERBUKA

- Q5** Three LANs located in two building A and B shown in **Figure Q5**. In order for the LANs to be interconnected and combined into single network, routers R1 and R2 were used.
- (a) Determine the IP addresses for the PC1, PC2, PC3, PC4 and the HTTP server.
(5 marks)
 - (b) Show the configuration commands for the R2 router using static address so that all PCs are accessible to the HTTP Server.
(5 marks)
 - (c) Determine the IP addresses for the S1 Fa0/0, S2 Fa0/0, R1 Fa0/0, R1 Fa0/1 and R1 Fa0/1/0 interfaces.
(5 marks)
 - (d) Determine the IP addresses for the S3 Fa0/0, S3 Fa0/0, R2 Fa0/0, R2 Fa0/1 and R1 Fa0/1/0 interfaces.
(5 marks)

- END OF QUESTIONS -

TERBUKA

FINAL EXAMINATION

SEMESTER / SESSION : SEM II / 2017/2018
COURSE NAME: BASIC COMPUTER NETWORK

PROGRAMME CODE : DAT
COURSE CODE : DAT 21203

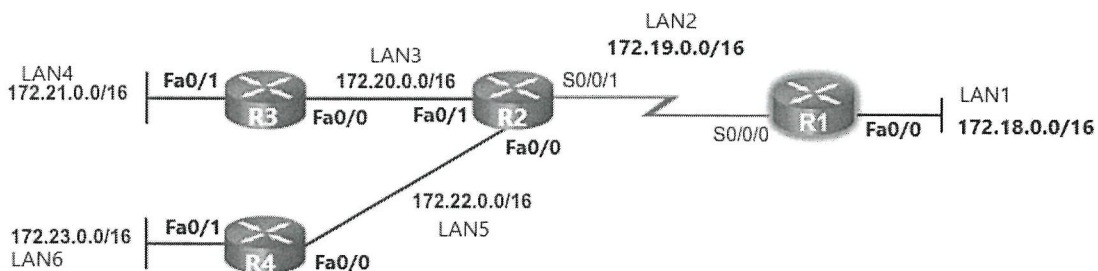


Figure Q3

TERBUKA

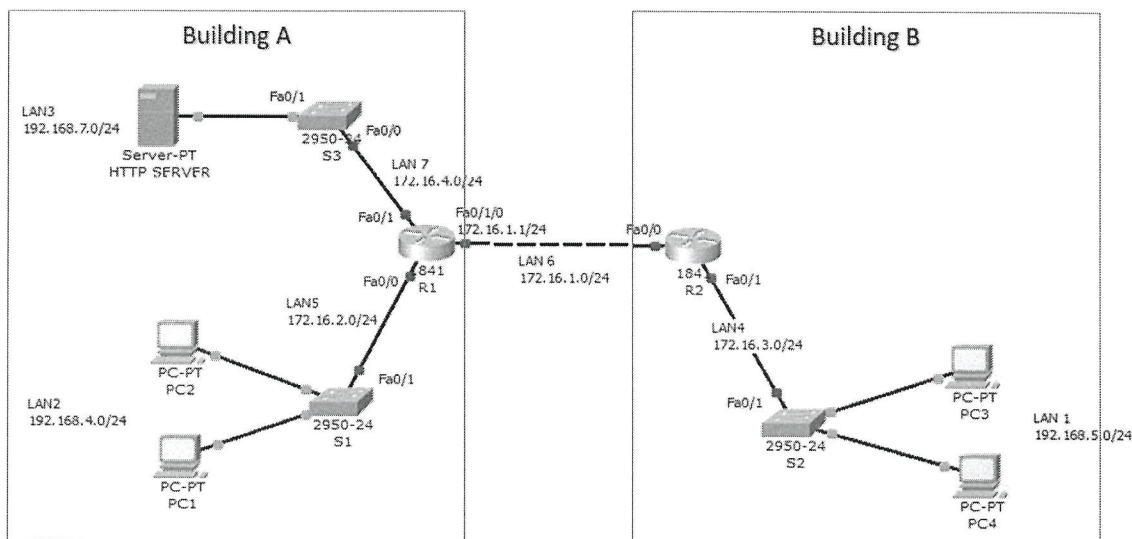


Figure Q5