

17

SULIT



BAHAGIAN PEPERIKSAAN DAN PENILAIAN
JABATAN PENDIDIKAN POLITEKNIK
KEMENTERIAN PENDIDIKAN TINGGI

JABATAN TEKNOLOGI MAKLUMAT DAN KOMUNIKASI

PEPERIKSAAN AKHIR
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DFN3124: SWITCHING AND ROUTING ESSENTIALS

TARIKH : 04 APRIL 2016 (ISNIN)
MASA : 11.15 AM – 1.15 PM (2 JAM)

Kertas ini mengandungi **DUA PULUH EMPAT (24)** halaman bercetak.

Bahagian A: Objektif (30 soalan)

Bahagian B: Struktur (2 soalan)

Dokumen sokongan yang disertakan : Tiada

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

SULIT



SECTION A : 45 MARKS**BAHAGIAN A : 45 MARKAH****INSTRUCTION:**

This section consists of **THIRTY (30)** objective questions. Mark your answers in the OMR form provided.

ARAHAN :

Bahagian ini mengandungi **TIGA PULUH (30)** soalan objektif. Tandakan jawapan anda di dalam borang OMR yang disediakan.

CLO1
C1

1. Identify the type of transmission switch used when the destination MAC address was not in the MAC address table?

Kenalpasti jenis penghantaran sebuah switch apabila alamat MAC destinasi tiada dalam jadual alamat MAC.

- A. Unicast
- B. Anycast
- C. Multicast
- D. Broadcast

CLO1
C1

2. Which interface of the default location that contains the IP address used to manage a 24-port Ethernet switch?

Manakah satu antaramuka lokasi default yang terkandung alamat IP yang digunakan untuk mengurus sebuah switch 24 port?

- A. Fa 0/0
- B. Fa 0/1
- C. VLAN 1
- D. VLAN 99

CLO1
C2

3. Choose the default violation mode for a switch port once the port security is enabled.

Pilih mod default violation untuk suatu switch port apabila port security diaktifkan.

- A. Pause
- B. Restart
- C. Blocked
- D. Shutdown

CLO1
C2

4. Based on **Figure 1**, how does a frame sent from PCA then forwarded to PCC if the MAC address table on switch SW1 is empty?

Berdasarkan Rajah 1, bagaimakah kerangka dihantar dari PCA ke PCC sekiranya jadual alamat MAC di dalam switch 1 kosong?

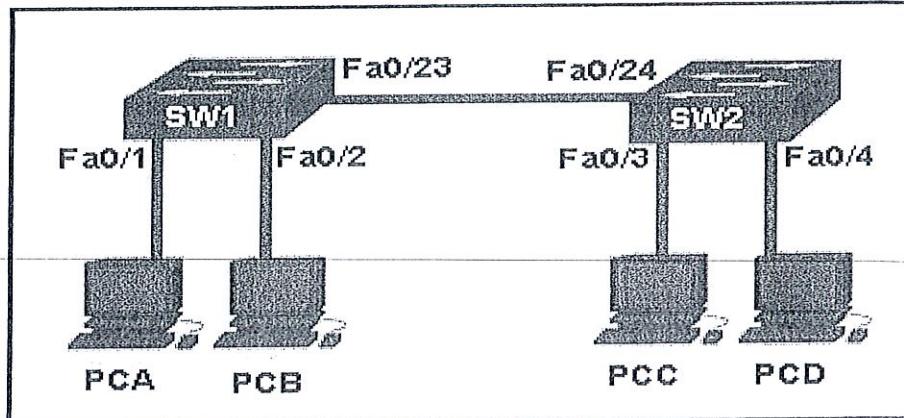


Figure 1 / Rajah 1

- A. SW1 forwards the frame directly to SW2.
SW1 menghantar kerangka secara terus ke SW2.
- B. SW1 floods the frame on all ports excluding the interconnected port to switch SW2.
SW1 membanjiri kerangka pada semua port yang ada tidak termasuk port yang berhubung dengan switch SW2.
- C. SW1 floods the frame on all ports excluding the port through which the frame entered the switch.
SW1 membanjiri kerangka pada semua port tidak termasuk port yang dilalui oleh kerangka tersebut ke dalam switch.
- D. SW1 drops the frame because it does not know the destination MAC address.
SW1 membuang kerangka tersebut kerana alamat MAC tidak diketahui.

CLO2

C1

5. Which statement is TRUE on the running configuration file in a Cisco IOS device?

Pernyataan yang manakah **BENAR** tentang fail konfigurasi berjalan dalam peranti Cisco IOS?

- A. It should be deleted using the erase running-config command.
Ia perlu dipadam menggunakan arahan erase running-config.
- B. It is automatically saved when the router reboots.
Ia disimpan secara spontan apabila router reboots.
- C. It affects the operation of the device immediately when modified.
Ia akan mempengaruhi operasi alat apabila diubahsuai.
- D. It is stored in NVRAM.
Ia akan disimpan di dalam NVRAM.

CLO2
C1

6. Select the **BEST** statement that describe DTP.

Pilih pernyataan yang **TERBAIK** untuk menerangkan DTP.

- A. DTP supports IEEE 802.1Q
DTP menyokong IEEE 802.1Q
- B. DTP must be enabled on only one side of the trunk link
DTP mesti dibenarkan pada salah satu belah laluan trunk
- C. Cisco switches require DTP to establish trunk
Switch Cisco memerlukan DTP untuk menghidupkan trunk
- D. Trunk ports that are configured for dynamic auto will request to enter the trunking state
Port trunk yang dikonfigurasi secara dinamik akan memohon untuk memasuki trunking state secara auto.

CLO1
C1

7. Which of the following are benefits of using VLANs?

- A. Cost saving
Menjimatkan kos
- B. Increase Broadcast domain
Meningkatkan Domain broadcast
- C. Complex application management
Pengurusan aplikasi semakin kompleks
- D. Increase the latency of performance
Kelewatan prestasi meningkat

CLO1
C1

8. A LAN switch examines the destination of MAC address to forward the frame. Determine the switch action if the destination of MAC address of unicast frame is not in the MAC address table?

Sebuah LAN switch memeriksa alamat MAC destinasi untuk menghantar kerangka. Tentukan tindakan switch sekiranya alamat MAC destinasi kerangka unicast tiada dalam MAC address table.

- A. The switch discard the frame
Switch menyingkirkan frame
- B. The switch floods the frame to all ports
Switch membanjiri frame kesemua port
- C. The switch add the MAC address into MAC address table
Switch menambah alamat MAC ke dalam MAC address table
- D. The switch forward the frame directly to destination port
Switch terus menghantar frame ke port destinasi

CLO1
C2

9. A router has a valid operating system and a configuration stored in NVRAM. When the router boots up, which mode will be displayed?

Router mempunyai sistem operasi yang sah dan konfigurasi disimpan di dalam NVRAM. Apabila router dihidupkan semula, apakah mod yang akan dipaparkan?

- A. Setup mode
Mode setup
- B. User EXEC mode
Mod pengguna EXEC
- C. ROM monitor mode
Mod monitor ROM
- D. Global configuration mode
Mod konfigurasi global

CLO1
C3

10. What would happen to the routing table when a router is switched off?

Apakah akan terjadi kepada routing table apabila sesebuah router dipadamkan?

- A. The information is lost.
Informasi tersebut hilang
- B. The information is saved in a flash memory.
Informasi disimpan di dalam ingatan flash.
- C. The information is automatically saved in NVRAM.
Informasi disimpan di dalam NVRAM secara otomatis.
- D. There will be a prompt to remind the administrator to save the information to NVRAM.
Satu prompt peringatan kepada administrator untuk menyimpan informasi ke dalam NVRAM.

CLO1
C3

11. Why would a Layer 2 switch need an IP address?

- Mengapakah suis Layer 2 perlukan alamat IP?*
- A. To enable the switch to send broadcast frames to the attached PCs
Untuk membolehkan switch menghantar broadcast frame kepada PC terlibat
 - B. To enable the switch to function as a default gateway
Untuk membolehkan switch berfungsi sebagai default gateway
 - C. To enable the switch to receive frames from the attached PCs
Untuk membolehkan switch menerima frame daripada PC terlibat
 - D. To enable the switch to be managed remotely
Untuk membolehkan switch diurus secara jauh

CLO2
C1

12. What is a user trying to identify when issuing a ping 10.1.1.1 command on a PC?

- Apakah yang dimaksudkan dengan arahan ping 10.1.1.1 pada PC yang di masukkan oleh pengguna?*
- A. The connectivity with the destination device
Jika ada sambungan kepada peranti yang dituju
 - B. The type of device at the destination
Memastikan jenis peranti di destinasi
 - C. The TCP/IP stack is functioning on the PC without putting the traffic on the wire.
Jika TCP/IP stack berfungsi pada PC tanpa menghasilkan traffic
 - D. The path that traffic will take to reach the destination
Laluan traffic yang diambil untuk mencapai destinasi

CLO2
C1

13. Based on **Figure 2** below, identify the result when the following commands are executed on a Cisco Catalyst switch :-

Dari Rajah 2, meramalkan keputusan yang menjadi apabila arahan berikut dilaksanakan pada suis Cisco Catalyst: -

```
TechTarget-SW1 (config-if)# switchport port-security
TechTarget-SW1 (config-if)# switchport port-security mac-address sticky
```

Figure 2 / Rajah 2

- A. The MAC address learned dynamically is saved in the switch's running-configuration.
Alamat MAC yang belajar secara dinamik disimpan di dalam konfigurasi suis.
- B. The MAC address learned dynamically is saved in the switch's startup-configuration.
Alamat MAC belajar dinamik disimpan di dalam permulaan-konfigurasi suis itu.
- C. The MAC address learned dynamically is saved permanently in the VLAN database.
Alamat MAC dipelajari secara dinamik disimpan secara kekal dalam pangkalan data VLAN ini.
- D. The first MAC address "seen" on the specific port is allowed to access the network until the port-security timer expires.
Alamat MAC pertama "dilihat" di port tertentu dibenarkan untuk mengakses rangkaian sehingga masa port-Security tamat.

CLO2
C2

14. Choose the correct command to configure IPv4 default static route.

Pilih arahan yang betul untuk mengkonfigur IPv4 default static route.

- A. ip route 0.0.0.0 0.0.0.0 S0/0/0
- B. ip route 0.0.0.0 255.255.255.0 S0/0/0
- C. ip route 0.0.0.0 255.255.255.255 S0/0/0
- D. ip route 0.0.0.0 255.0.0.0 S0/0/0

CLO2
C3

15. Based on output in **Figure 3**, identify which ports on Sw-AC3 are operating with trunks?

Berdasarkan paparan dalam Rajah 3, kenalpasti port di Sw-AC3 beroperasi yang mempunyai trunks?

Based on the details in Figure 4 below, we can conclude that the MAC address 0010.5a0c.ffba is associated with interface Fa0/8

Melihat Rajah 4 terperinci di bawah, kita boleh menyimpulkan bahawa alamat MAC 0010.5a0c.ffba dikaitkan dengan antara muka

Sw-Ac3#show mac-address-table
Mac Address Table

Vlan	Mac Address	Type	Ports
All	000f.2485.8900	STATIC	CPU
All	0100.0ccc.cccc	STATIC	CPU
All	0100.0cc0.000d	STATIC	CPU
All	0100.0odd.ddd0	STATIC	CPU
1	0009.e8b2.c28c	DYNAMIC	fa0/12
1	000a.b7e9.8360	DYNAMIC	fa0/3
1	000f.2485.8b49	DYNAMIC	fa0/9
22	0009.e8b2.c28c	DYNAMIC	fa0/12
22	000a.b7e9.8360	DYNAMIC	fa0/3
22	0010.5a0c.ffba	DYNAMIC	fa0/8
33	0009.e8b2.c28c	DYNAMIC	fa0/12
33	000a.b7e9.8360	DYNAMIC	fa0/3
33	000c.ce8d.8860	DYNAMIC	fa0/12
33	0010.5a0c.fd86	DYNAMIC	fa0/6
33	0010.5a0c.fea8	DYNAMIC	fa0/12
33	0010.5a0c.ff9f	DYNAMIC	fa0/1
44	0009.e8b2.c28c	DYNAMIC	fa0/12

Figure 3 / Rajah 3

- A. Fa0/1, Fa0/4 and Fa0/12
- B. Fa01, Fa0/4 and Fa0/6
- C. Fa0/1, Fa0/3 and Fa0/4
- D. Fa0/3 and Fa0/12

CLO2
C3

16. Calculate the valid summary route for the networks 192.168.8.0/22, 192.168.12.0/22, and 192.168.16.0/22.

Kira summary route yang sah untuk rangkaian 192.168.8.0/22, 192.168.12.0/22, dan 192.168.16.0/22.

- A. 192.168.0.0/18
- B. 192.168.0.0/19
- C. 192.168.0.0/20
- D. 192.168.8.0/21

CLO1
C2

17. Identify the purpose of Dynamic Routing Protocols.

Kenalpasti tujuan Dynamic Routing Protokol.

- i. To maintain up-to-date routing information.
Mengemas kini maklumat routing.
- ii. To discovery of remote networks.
Penemuan rangkaian jarak jauh.
- iii. To assign IP addressing.
Menentukan IP address.
- iv. To choose the best path to destination networks.
Memilih jalan yang terbaik untuk destinasi sesuatu rangkaian.

- A. i,ii and iii
- B. i,ii and iv
- C. i,iii and iv
- D. ii,iii and iv

CLO1
C3

18. A router is participating in OSPFv2 domain. Select the **BEST** scenario if the dead interval expires before the router receives a hello packet from other router?

*Satu router berada dalam kawasan OSPFv2. Pilih scenario **TERBAIK** jika terdapat ‘dead interval’ sebelum router menerima paket hello daripada router lain?*

- A. OSPF will run and determine which neighbour router is “down”
OSPF akan berfungsi dan akan menentukan router jiran yang mana telah “down”
- B. OSPF will run a new DR/BDR election
OSPF akan menjalankan pemilihan DR/BDR yang baru
- C. OSPF will remove that neighbour from the router link-state database
OSPF akan menyingkirkan jiran daripada database router link-state
- D. A new hello interval will start
Selang hello yang baru akan bermula

CLO1
C3

19. Based on **Figure 4**, choose how many hops away does R1 consider the 2001:0DB8:ACAD:1::/64 network to be if RIPng is enabled?

Berdasakan Rajah 4, pilih berapa bilangan hop dari R1 ke rangkaian 2001:0DB8:ACAD:1::/64 jika RIPng dibenarkan?

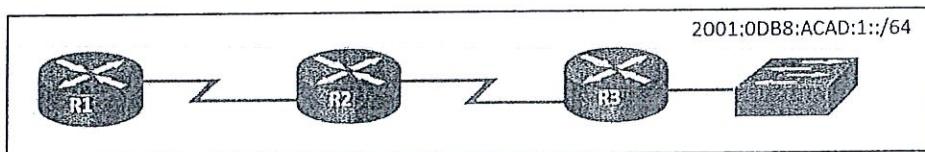


Figure 4 / Rajah 4

- A. 1
- B. 2
- C. 3
- D. 4

CLO2
C1

20. Choose the **CORRECT** purpose of the “passive-interface” command.

- Pilih tujuan yang **BENAR** untuk arahan “passive-interface”.*
- A. To allow a router to receive routing updates on an interface but not send updates via that interface
Untuk membenarkan router menerima kemaskini disatu antaramuka tetapi tidak menghantar kemaskini dengan antaramuka tersebut
 - B. To allow interfaces to share IP addresses
Untuk membenarkan antaramuka untuk berkongsi alamat IP
 - C. To allow an interface to remain up without receiving keepalives
Untuk membenarkan antaramuka untuk kekal aktif tanpa menerima keepalives
 - D. To allow a routing protocol to forward updates out an interface that is missing its IP address
Untuk membenarkan routing protocol menghantar kemaskini keluar dari antaramuka yang tiada alamat IP.

CLO2
C1

21. Identify which of the command that provide information specific to OSPFv2 routes in routing table?

Kenalpasti yang manakah arahan untuk mendapatkan maklumat untuk OSPFv2 pada routing table?

- A. show ip route ospf
- B. show ip route
- C. show ipv6 route ospf
- D. show ipv6 route

CLO2
C2

22. Output of **Figure 5** is a result has taken from the command at the router. Identify which interface will be the exit interface to forward a data packet with the destination IP address 172.16.0.66?

Paparan Rajah 5 menunjukkan keputusan bagi arahan pada router, Interface mana kah forward data packet akan keluar untuk sampai ke alamat IP 172.16.0.66?

```
R1# show ip route
<output omitted>

Gateway of last resort is not set

      172.16.0.0/16 is variably subnetted, 7 subnets, 3 masks
R        172.16.0.0/26 [120/1] via 192.168.1.1, 00:00:24, Serial0/0/0
D        172.16.0.64/26 [90/2170112] via 192.168.1.6, 00:05:56, Serial0/0/1
R        172.16.0.128/26 [120/1] via 192.168.1.1, 00:00:24, Serial0/0/0
C        172.16.0.192/27 is directly connected, GigabitEthernet0/0
L        172.16.0.193/32 is directly connected, GigabitEthernet0/0
C        172.16.0.224/27 is directly connected, GigabitEthernet0/1
L        172.16.0.225/32 is directly connected, GigabitEthernet0/1
      192.168.1.0/24 is variably subnetted, 4 subnets, 2 masks
C        192.168.1.0/30 is directly connected, Serial0/0/0
L        192.168.1.2/32 is directly connected, Serial0/0/0
C        192.168.1.4/30 is directly connected, Serial0/0/1
L        192.168.1.5/32 is directly connected, Serial0/0/1
      192.168.2.0/30 is subnetted, 1 subnets
R        192.168.2.0/30 [120/1] via 192.168.1.1, 00:00:24, Serial0/0/0
R1#
```

Figure 5 / Figure 5

- A. Serial0/0/0
- B. Serial0/0/1
- C. GigabitEthernet0/0
- D. GigabitEthernet0/1

CLO2
C1

23. A network technician has applied ACL on the router. He wants to display the contents of current IP and rate-limit access lists. Identify the command that he needs to use.

Juruteknik rangkaian telah melaksanakan ACL pada router. Dia ingin mempamerkan Alamat IP semasa dan menghadkan access rate. Kenalpasti arahan yang boleh dia gunakan untuk situasi ini?

- A. show running-config
- B. show ip interface brief
- C. show access-lists
- D. show ACL

- CLO2
C1 24. Choose which of the command used to activate an IPv6 ACL named ENG_ACL on an interface so that the router filters the traffic prior to accessing the routing table.

Pilih arahan yang manakah untuk mengaktifkan IPv6 ACL bernama ENG_ACL pada satu antaramuka supaya router menyaring trafik selepas mengakses routing table.

- A. ipv6 access-class ENG_ACL in
- B. ipv6 access-class ENG_ACL out
- C. ipv6 traffic-filter ENG_ACL in
- D. ipv6 traffic-filter ENG_ACL out

- CLO2
C2 25. Based on **Figure 6**, select the **CORRECT** statement by referring to the output given.

Berdasarkan paparan daripada Rajah 6, pilih pernyataan yang BENAR berdasarkan paparan yang diberikan.

```
R1# show access-list MyACL
Extended IP access list MyACL
10 permit tcp host 10.35.80.22 host 10.23.77.101 eq telnet
20 permit tcp host 10.35.80.25 host 10.23.77.101 eq 16100 (149407 matches)
30 permit tcp host 10.35.80.25 host 10.23.77.101 eq 17600 (80592 matches)
40 permit tcp host 10.35.80.27 host 10.23.77.101 eq 10701 (26003 matches)
```

Figure 6 / Rajah 6

- A. The ACL is missing the "deny ip any any ACE" statement
ACL kehilangan penyataan "deny ip any any ACE"
- B. There are no matches for line 10, the ACL is not working.
Tiada kesamaan untuk line 10, ACL tidak berfungsi.
- C. The ACL is only monitoring traffic destined for 10.23.77.101 from three specific hosts.
ACL hanya digunakan untuk memantau trafik untuk 10.23.77.101 dari 3 hos.
- D. The router has not had any Telnet packets from 10.35.80.22 that are destined for 10.23.77.101.
Router tiada paket Telnet dari 10.35.80.22 yang ditentukan untuk 10.23.77.101.

CLO2
C3

26. Calculate how many addresses that will be available for dynamic NAT translation when a router is configured with the commands based on **Figure 7**.

Kira berapa banyak alamat yang boleh digunakan untuk dynamic NAT translation bila router dikonfigurasi dengan arahan berdasarkan Rajah 7.

```
Router(config)#ip nat pool TAME 209.165.201.23
209.165.201.30 netmask 255.255.255.224
```

```
Router(config)#ip nat inside source list 9 pool TAME
```

Figure 7 / Rajah 7

- A. 6
- B. 7
- C. 8
- D. 9

CLO2
C3

27. Based on **Figure 8** below, a network administrator configures the border router with the command below. Select which of the following command need to be configured.

Rujuk Rajah 8, seorang pentadbir rangkaian mengkonfigurasi router sempadan dengan arahan dibawah. Pilih yang arahan yang perlu digunakan untuk mengkonfigurasi arahan ini.

```
R1(config)# ip nat inside source list 4 pool corp'
```

Figure 8 / Rajah 8

- A. VLAN named corp to be enabled and active and routed by R1
VLAN bernama corp untuk mengaktifkan aktif dan dihantar oleh R1
- B. NAT pool named corp that defines the starting and ending public IP addresses
NAT bernama corp yang mendefinisikan bermula dan berakhir alamat IP awam
- C. Access list number 4 that defines the starting and ending public IP addresses
Senarai akses bernombor 4 yang menentukan permulaan dan berakhir alamat IP awam
- D. Access list named corp that defines the private addresses that are affected by NAT
Senarai akses bernama corp yang mendefinisikan alamat swasta yang dipengaruhi oleh NAT

CLO2
C3

28. Refer to **Figure 9**. What will be the effect of entering the command that is shown in the exhibit on R2 as part of the dynamic NAT configuration?

Merujuk kepada Rajah 9. Apa yang akan menjadi kesan memasuki arahan yang ditunjukkan dalam pameran pada R2 sebagai sebahagian daripada konfigurasi NAT dinamik?

```
R2(config)# ip nat inside source list 1 pool NAT-POOL1
```

Figure 9 / Rajah 9

- A. It will bind NAT-POOL1 with ACL 1.
Ia akan mengikat NAT-POOL1 dengan ACL 1.
- B. It will identify an inside NAT interface.
Ia akan mengenal pasti antara muka NAT dalam
- C. It will define a pool of addresses for translation.
Ia akan menentukan kumpulan alamat untuk terjemahan.
- D. It will define the source ACL for the external interface
Ia akan menentukan ACL sumber untuk antara muka luaran

CLO2
C2

29. Based on **Figure 10**, select the **CORRECT** statement on what is the administrator trying to achieve.

Berdasarkan Rajah 10, pilih pernyataan yang BENAR tentang apa yang pentadbir inginkan.

```
Router(config)# interface g0/1
Router(config-if)# ip address dhcp
```

Figure 10 / Rajah 10

- A. Configuring the router to act as a DHCPv4 server
Konfigurasi router untuk bertindak sebagai server DHCP
- B. Configuring the router to obtain IP parameters from a DHCPv4 server
Konfigurasi router untuk mengambil parameter Ip dari server DHCPv4
- C. Configuring the router to act as a relay agent
Konfigurasi router untuk bertindak sebagai relay agent.
- D. Configuring the router to resolve IP address conflicts
Konfigurasi router untuk menyelesaikan konflik alamat IP

CLO2

C2

30. A host on the 10.10.100.0/24 LAN has not been assigned an IPv4 address by an enterprise DHCP server with the address 10.10.200.10/24. Select the best way for the network engineer to resolve this problem.

Satu host di LAN 10.10.100.0/24 tidak diberikan dengan alamat IPv4 oleh server DHCP syarikat dengan alamat 10.10.200.10/24. Pilih cara terbaik untuk jurutera rangkaian untuk menyelesaikan masalah ini.

- A. Issue the command “ip helper-address 10.10.200.10” on the router interface that is the 10.10.100.0/24 gateway.
Isukan arahan “ip helper-address 10.10.200.1” pada antaramuka router yang menjadi gateway dengan alamat 10.10.100.0/24
- B. Issue the “command default-router 10.10.200.10” at the DHCP configuration prompt on the 10.10.100.0/24 LAN gateway router.
Isukan arahan “command default-router 10.10.200.10” di tempat konfigurasi DHCP pada gateway router LAN 10.10.100.0/24
- C. Issue the command “ip helper-address 10.10.100.0” on the router interface that is the 10.10.200.0/24 gateway.
Isukan arahan “ip helper-address 10.10.100.0” pada antaramuka router di gateway 10.10.200.0/24.
- D. Issue the command “network 10.10.200.0 255.255.255.0” at the DHCP configuration prompt on the 10.10.100.0/24 LAN gateway router.
Isukan arahan “network 10.10.200.0 255.255.255.0” di tempat konfigurasi DHCP pada gateway router LAN 10.10.100.0/24

SECTION B : 55 MARKS**BAHAGIAN B : 55 MARKAH****INSTRUCTION:**

This section consists of **TWO (2)** structured questions. Answer **ALL** the questions.

ARAHAN:

Bahagian ini mengandungi **DUA (2)** soalan berstruktur. Jawab **SEMUA** soalan.

QUESTION 1**SOALAN 1**CLO1
C1

- (a) (i) Define Full Duplex communication in LAN switch.

Definisikan komunikasi Full Duplex dalam LAN switch

[3 marks]
[3 markah]

- (ii) Write **THREE (3)** characteristics of store-and-forward switching method.

*Tuliskan **TIGA (3)** ciri-ciri kaedah switching store-and-forward.*

[3 marks]
[3 markah]

CLO2
C2

- (b) Describe **TWO (2)** types of switching methods.

*Terangkan **DUA (2)** jenis kaedah switching.*

[6 marks]
[6 markah]

CLO1
C1

- (c) (i) What is the definition of Inter-VLAN routing?

Apakah maksud Inter-VLAN routing?[1 marks]
[1 markah]

- (ii) Describe TWO (2) types of VLAN attack known as “Switch Spoofing Attack” and “Double Tagging Attack”.

Terangkan DUA (2) jenis serangan VLAN yang dikenali sebagai “Switch Spoofing Attack” dan “Double Tagging Attack”.[6 marks]
[6 markah]CLO2
C2

- (d) As a network administrator, you are required to configure a new router based on the following requirements:

Sebagai seorang pentadbir rangkaian, anda dikehendaki untuk membuat konfigurasi pada sebuah router baru berdasarkan ketetapan berikut:

- (i) Configure the name of the router as
- HQ_Router**
-
- Konfigurasi nama pada router sebagai HQ_Router*

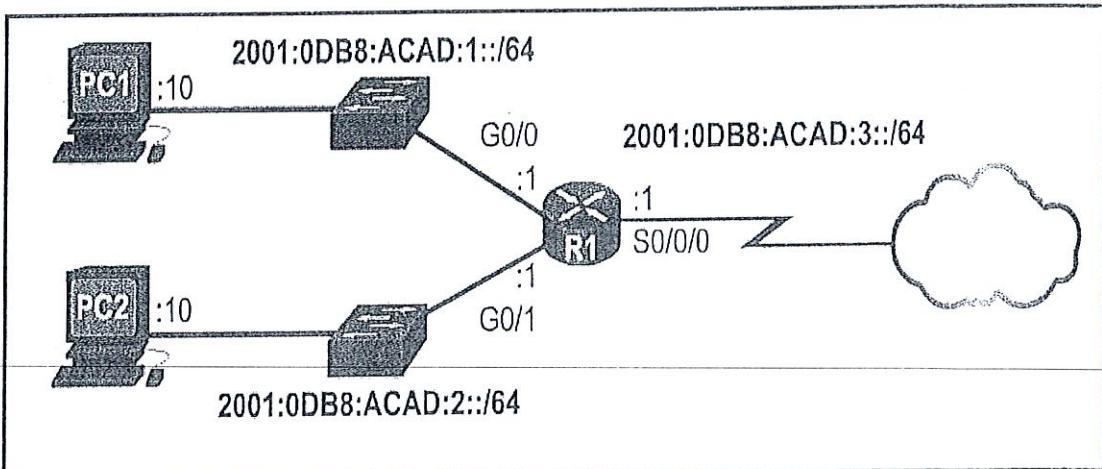
[2 marks]
[2 markah]

- (ii) Configure the
- admin**
- as the secret password
-
- Konfigurasi kata laluan rahsia sebagai admin*

[2 marks]
[2 markah]

- (iii) Enter the banner
- Authorized Access Only!**
-
- Masukkan banner Authorized Access Only!*

[2 marks]
[2 markah]

CLO2
C3(e) Refer to **Figure 11**.*Rujuk Rajah 11.***Figure 11 / Rajah 11**

- i. Write the command to configure R1 G0/1 interface with IPv6 address.

Tulis konfigurasi antaramuka R1 G0/1 dengan alamat IPv6.

[2 marks]
[2 markah]

- ii. Write the command to configure Serial 0/0/0 interface with IPv6 address and assume R1 as DCE with clock rate 128000.

Tulis konfigurasi antaramuka Serial 0/0/0 dengan alamat IPv6 dan menganggap R1 sebagai DCE dengan clock rate 128000.

[3 marks]
[3 markah]

QUESTION 2**SOALAN 2**CLO1
C1

- (a) Identify the following types of routing protocols with an example.

Kenalpasti setiap jenis protocol routing berikut beserta contoh.

- (i) Interior Gateway Protocols (IGP)
- (ii) Exterior Gateway Protocols (EGP)

[5 marks]
[5 markah]

CLO2
C2

- (b) Write a set of commands to configure router RW1 based on the following requirements:

Tuliskan satu set arahan untuk membuat konfigurasi pada router RW1 berdasarkan ketetapan berikut:

- (i) Enter OSPF router configuration mode using process ID 15

Masuk ke mod konfigurasi OSPF menggunakan ID proses 15

[2 marks]
[2 markah]

- (ii) Assign a Router ID of 1.1.1.1

Tetapkan ID router 1.1.1.1

[2 marks]
[2 markah]

- (iii) Return to privileged EXEC mode

Kembali ke mod priviledge

[1 marks]
[1 markah]

- CLO2
C1 (c) A wildcard mask is a sequence of numbers that streamlines packet routing within the subnets of a proprietary network. Wildcard masks are commonly used with Open Shortest Path First (OSPF) router protocols and in access control lists for Cisco routers.

Wildcard mask adalah turutan nombor yang menyelaraskan laluan paket dalam subnet rangkaian proprietari. Wildcard masks biasanya digunakan dengan Open Shortest Path First (OSPF) protokol penghala dan dalam Access Control Lists untuk Cisco router.

Write the wildcard based on the IP address.

Tuliskan wildcard berdasarkan IP address

(i) 192.168.4.0 / 26

[2 marks]
[2 markah]

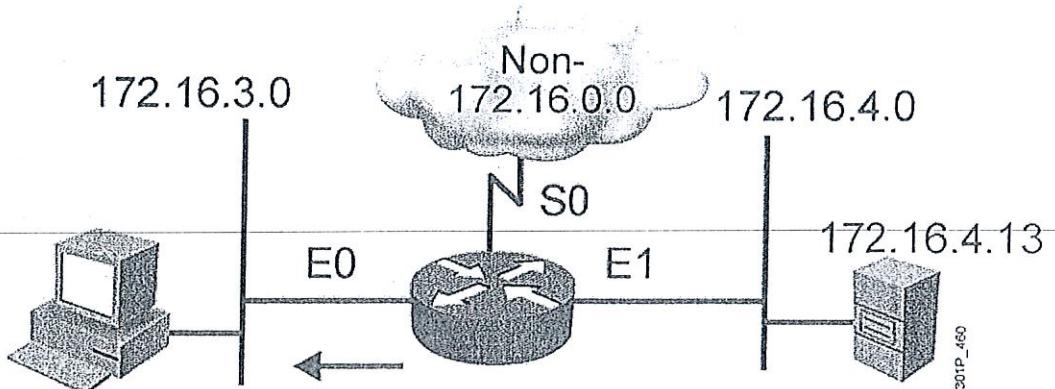
(ii) 10.2.2.0 / 30

[2 marks]
[2 markah]

CLO2
C3

- (d) Based on
- Figure 12**
- , write ACLs statement by referring to the requirements below:

Berdasarkan Rajah 12 dibawah, tuliskan kenyataan ACL berdasarkan keperluan berikut:

**Figure 12/ Rajah 12**

- (i) Prevent user from host 172.16.4.13 to access network 172.16.3.0 but able to go out to network non-172.16.0.0.

Menghalang pengguna 172.16.4.13 untuk mengakses rangkaian 172.16.3.0 tetapi boleh keluar ke rangkaian bukan 172.16.0.0.

[4 marks]
[4 markah]

- (ii) Allow all network access to network 172.16.3.0 except the user from 172.16.4.13.

Membenarkan semua akses ke rangakaian 172.16.3.0 kecuali pengguna dari 172.16.4.13

[2 marks]
[2 markah]

CLO2
C3

- (e) Write a command to:

Tuliskan arahan untuk:

- (i) disable DHCP

mematikan DHCP[1 mark]
[1 markah]

- (ii) verify the stateful DHCPv6 server

menyemak stateful DHCPv6 server[2 marks]
[2 markah]

- (iii) verify the stateless DHCP client

menyemak stateless DHCP client[2 marks]
[2 markah]

SOALAN TAMAT

