

SECTION B : 55 MARKS
BAHAGIAN B : 55 MARKAH

INSTRUCTION:

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

ARAHAN:

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

QUESTION 1
SOALAN 1

CLO1
C1

- a. Describes **TWO (2)** challenges in OSPF Multiaccess network.

Terangkan DUA (2) cabaran dalam rangkaian OSPF Multiaccess.

[3 marks]

[3 markah]

CLO1
C2

- b. Explain how router ID is determined in DR/BDR election process.

Terangkan bagaimana ID router ditentukan untuk proses pemilihan DR / BDR.

[3 marks]

[3 markah]

Refer to Figure B1 below to answer question 1c and question 1d.

Rujuk kepada Rajah B1 di bawah bagi menjawab soalan 1c dan 1d.

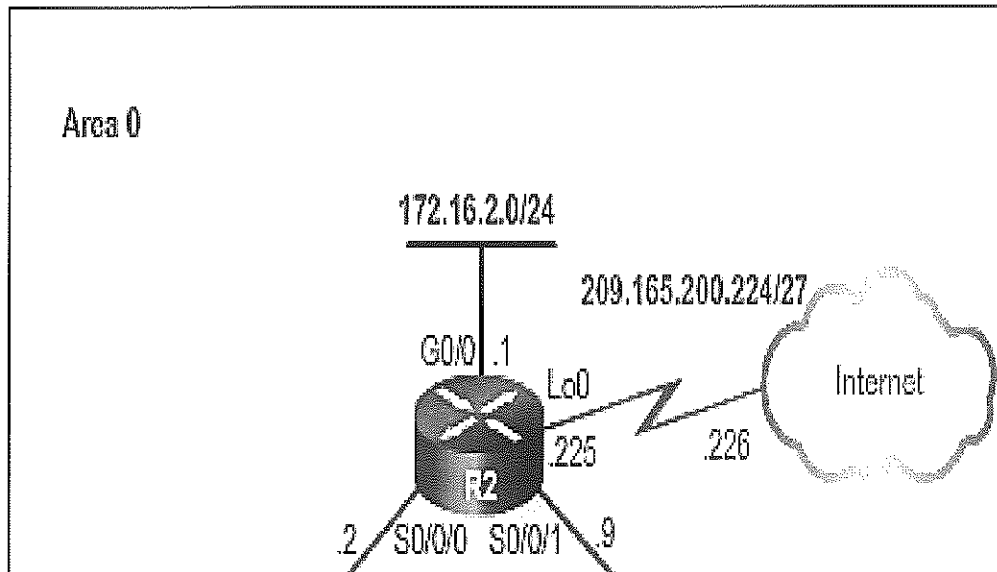


Figure B1 / Rajah B1

CLO2
C2

- c. Construct the command to enable a router ID's with IP address 22.22.22.22 on R2.

Binakan arahan bagi mewujudkan ID's router dengan alamat IP 22.22.22.22 untuk R2.

[2 marks]

[2 markah]

CLO2
C3

- d. Carry out the command to propagate a default static route in R2.

Laksanakan arahan bagi menyebarkan laluan statik lalai di R2.

[6 marks]

[6 markah]

CLO1
C2

- e. OSPF route summarization helps to keep routing tables small. Referring to Figure B2 below, calculate the route summarization for the following network addresses in order to reduce unnecessary LSA flooding.

Ringkasan laluan OSPF membantu mengekalkan jadual routing yang kecil. Merujuk kepada Rajah B2 di bawah, kirakan ringkasan laluan untuk alamat rangkaian yang diberikan untuk mengurangkan kebanjiran LSA.

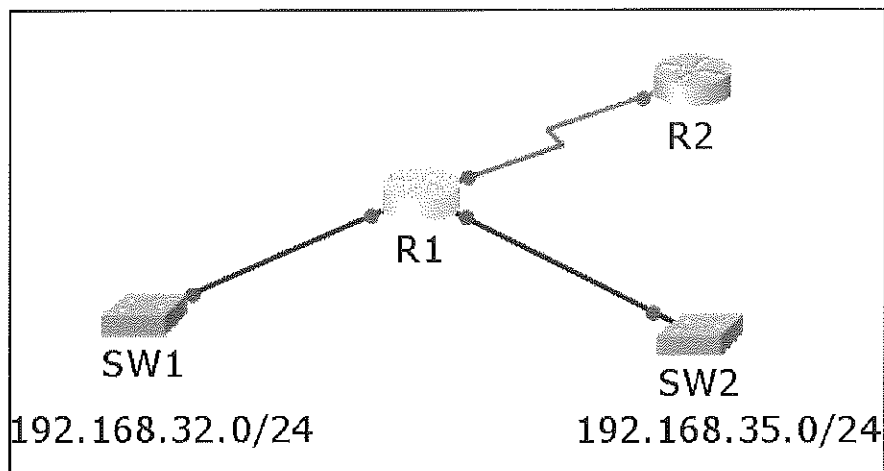


Figure B2 / *Rajah B2*

[4 marks]

[4 markah]

CLO2
C4

- f. Referring to Figure B3 below, analyze and write a configuration command to advertise Multiarea OSPF for R1 using process ID 10.

Merujuk kepada Rajah B3 di bawah, analisa dan tulis arahan konfigurasi untuk menyebarkan Multiarea OSPF bagi R1 dengan menggunakan proses ID 10.

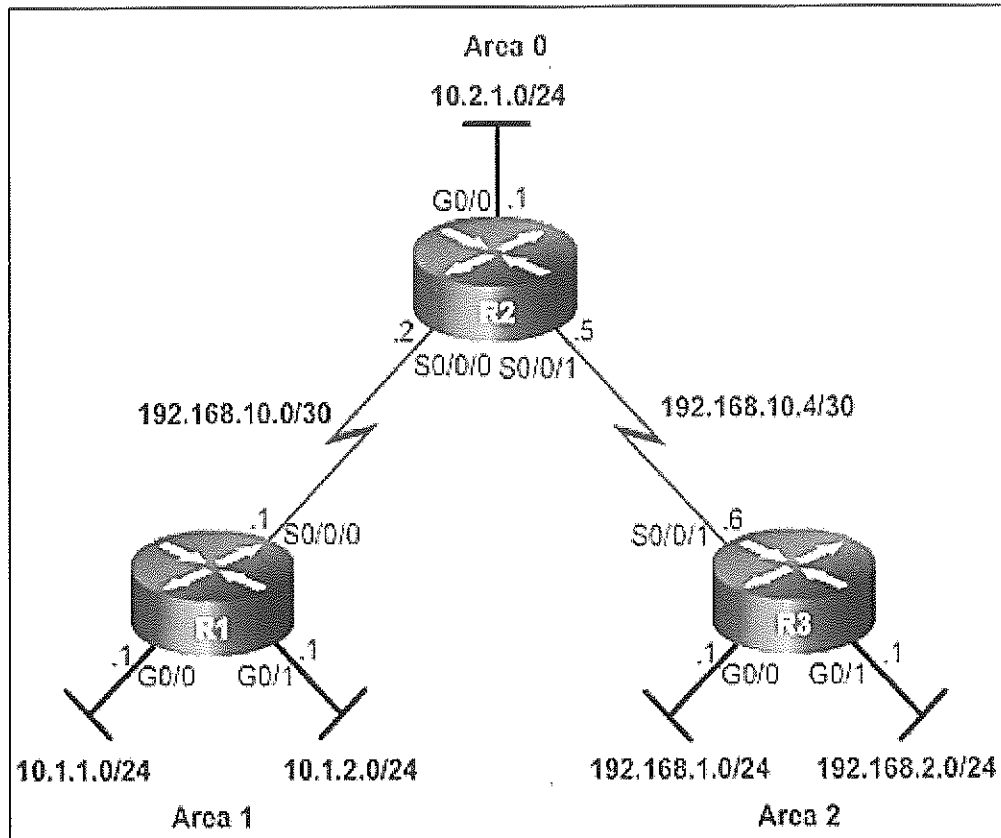


Figure B3 / Rajah B3

[4 marks]

[4 markah]

CLO1
C3

- g. Determine the commands used to verify multiarea OSPFv3 configuration.

Tentukan arahan yang digunakan untuk mengesahkan konfigurasi OSPFv3 multiarea.

[4 marks]

[4 markah]

CLO2
C4

- h. Referring to Figure B4 below, directly connected networks configured on router R1 are not being shared with neighboring routers through OSPFv3. *merujuk kepada Rajah B4 di bawah, rangkaian yang disambungkan secara langsung dikonfigurasi pada router R1 tidak dikongsi dengan router jiran melalui OSPFv3.*

```
R1# show running-config
<output omitted>

ipv6 unicast-routing
!
interface GigabitEthernet0/0
no ip address
ipv6 address 2001:DB8:CAFE:A001::1/64
ipv6 ospf 10 area 0
!
interface GigabitEthernet0/1
no ip address
ipv6 address 2001:DB8:CAFE:1::1/64
ipv6 ospf 10 area 0
!
ipv6 router ospf 1
router-id 1.1.1.1
log-adjacency-changes
```

Figure B4 / Rajah B4

- i) Suggest **TWO (2)** commands to troubleshoot related problems.
Cadangkan DUA (2) arahan untuk menyelesaikan masalah berkaitan.

[2 marks]

[2 markah]

- ii) Interpret main cause of the problem.
Tafsirkan punca utama masalah tersebut.

[2 marks]

[2 markah]

QUESTION 2

SOALAN 2

CLO1
C2

- a. Differentiate between Successor and Feasible Distance in EIGRP protocols.

Bezakan antara Successor dan Feasible Distance dalam protokol EIGRP.

[4 marks]

[4 markah]

CLO2
C3

- b. Refer to Figure B5 below. Router B is to be configured for EIGRP AS 100. Exhibit the network statement configurations that must be entered to advertise the network in Router B.

Rujuk Rajah B5 di bawah. Router B akan dikonfigurasi untuk EIGRP AS 100. Paparkan konfigurasi pernyataan rangkaian yang mesti dimasukkan untuk mengiklankan rangkaian di Router B.

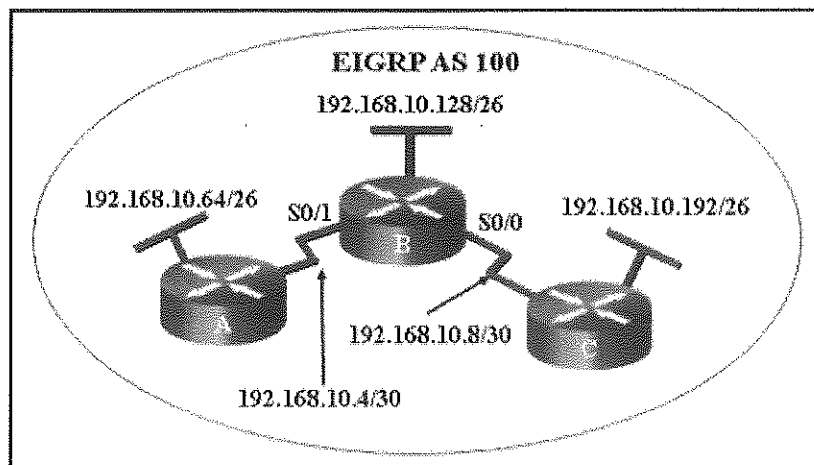


Figure B5 / Rajah B5

[5 marks]

[5 markah]

CLO1
C2

- c. Router R1 and Router R2 are establishing EIGRP neighbor adjacencies. Explain how routers exchange initial EIGRP Hello packets.

Router R1 dan Router R2 sedang menetapkan neighbor adjacencies EIGRP. Terangkan bagaimana router berukar initial EIGRP Hello packets.

[3 marks]

[3 markah]

CLO1
C4

- d. EIGRP automatic summarization can cause inconsistency in routing inside a network. Examine the scenario that might cause the problem as stated.

Ringkasan automatik EIGRP boleh menyebabkan ketidakkonsistenan pada 'routing' dalam rangkaian. Tentukan senario yang mungkin menyebabkan masalah seperti dinyatakan.

[3 marks]

[3 markah]

CLO2
C3

- e. List THREE (3) types of information that can be collected using the **show ip protocols** command when troubleshooting missing EIGRP routes on a router.

*Senaraikan TIGA (3) jenis maklumat yang boleh dikumpulkan menggunakan arahan **show ip protocols** apabila menyelesaikan masalah kehilangan laluan EIGRP pada router.*

[5 marks]

[5 markah]

CLO2
C4

- f. Router RA has three Fast Ethernet interfaces directly connected to LANs with network addresses 192.168.10.0/27, 192.168.10.32/27 and 192.168.10.64/27.

Router RA mempunyai tiga antarmuka Ethernet pantas yang disambungkan terus ke LAN dengan alamat rangkaian 192.168.10.0/27, 192.168.10.32/27 dan 192.168.10.64/27.

- i) Calculate the summarized address.

Kira alamat ringkasan.

[2 marks]

[2 markah]

- ii) Suggest the command to configure EIGRP manual summarization on a serial 0/0/0 interface that will be sent to the EIGRP neighbor of RA.

Cadangkan arahan untuk mengkonfigurasi ringkasan manual EIGRP pada serial 0/0/0 yang akan dihantar ke EIGRP jiran pada RA.

[3 marks]

[3 markah]

SOALAN TAMAT