A

Marks: 8/15

CSE 490 : : Quiz # 2

Sec-1

Time: 15 minutes

Student ID: 11201045

1 Differentiate between backbone and non-backbone routers. 4

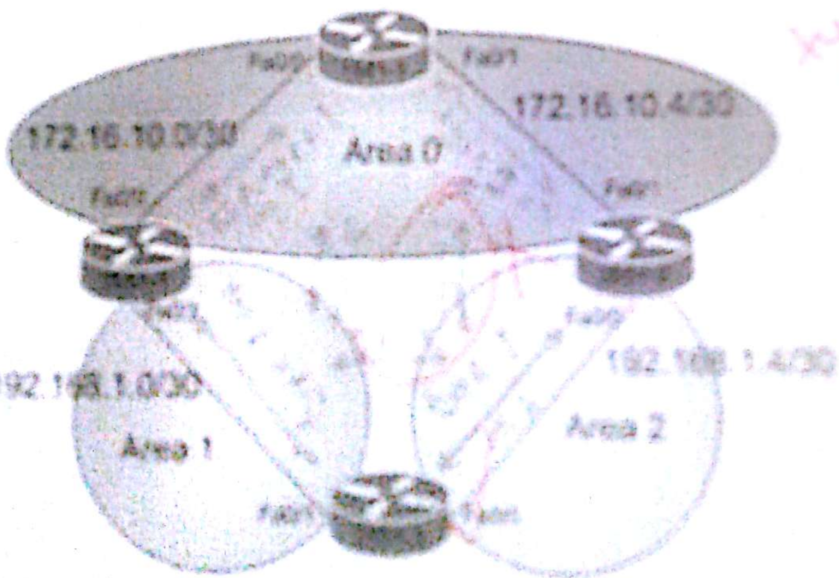
Backbone Router:

- Connects within the OSPF area types
- Usually called OSPF area 0, what not backbone routers

Non-backbone routers

- Connects users and networks
- Areas being non-backbone routers does not allow traffic from another area to use it as

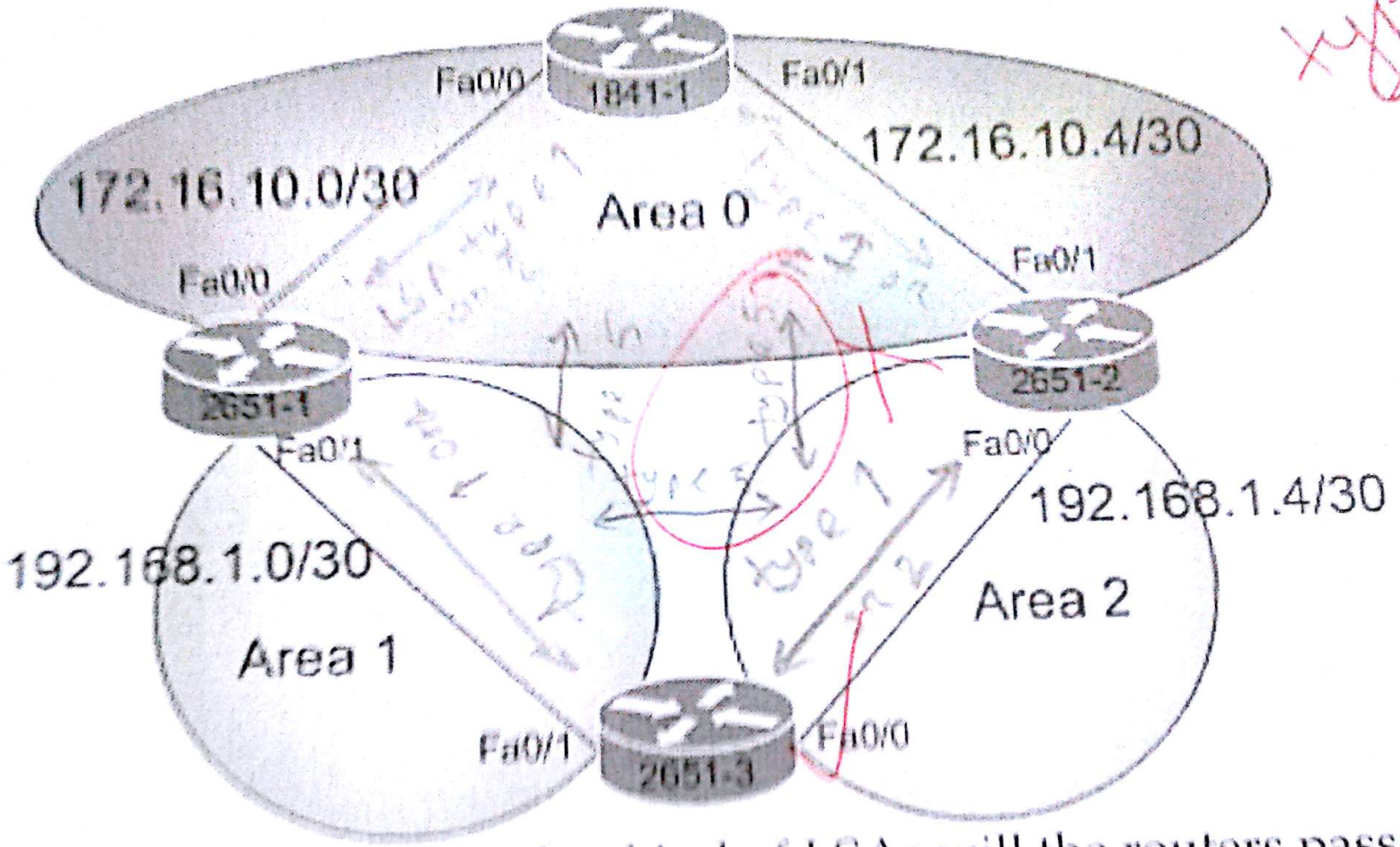
2 5



Draw in the diagram what kind of LSAs will the routers pass.

2.5

2



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Backbone Routers

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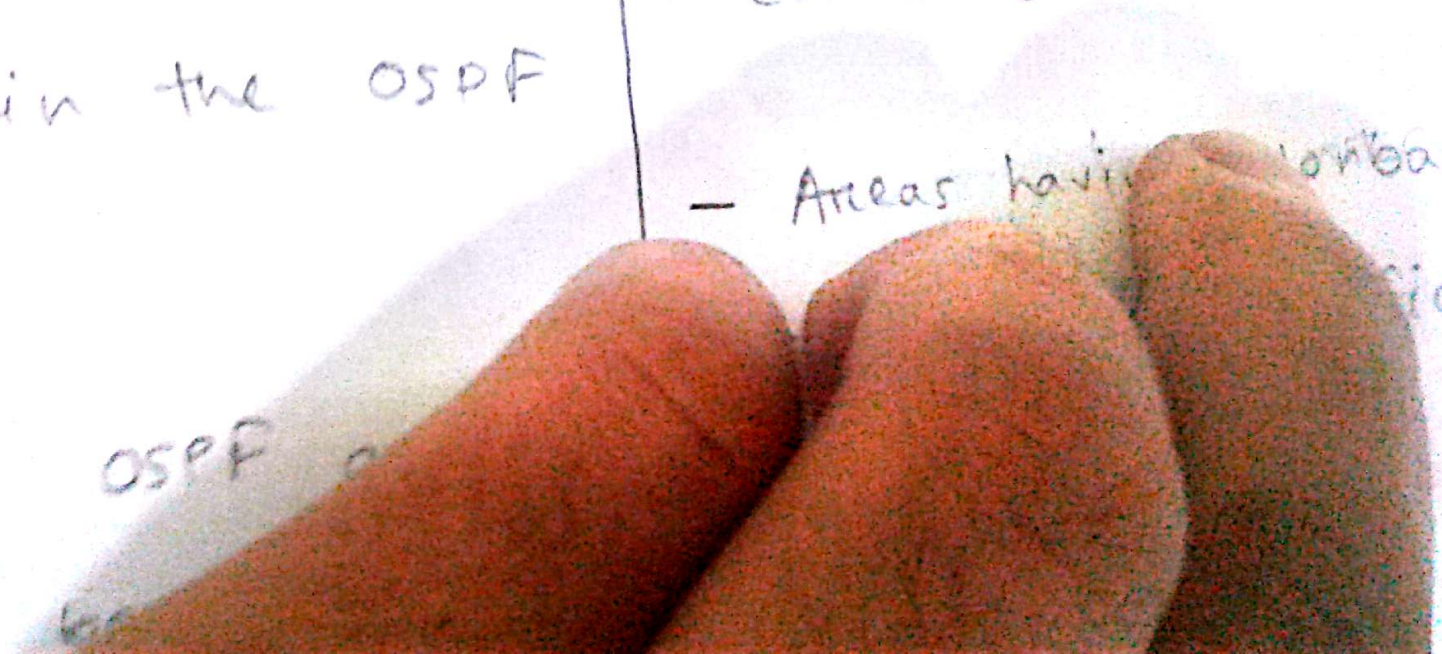

Router and Network Routing Table Entries

```
R1# show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       + - replicated route, % - next hop override

Gateway of last resort is 192.168.10.2 to network 0.0.0.0

O*E2 0.0.0.0/0 [110/1] via 192.168.10.2, 00:00:19, Serial0/0/0
     10.0.0.0/8 is variably subnetted, 5 subnets, 2 masks
C       10.1.1.0/24 is directly connected, GigabitEthernet0/0
L       10.1.1.1/32 is directly connected, GigabitEthernet0/0
C       10.1.2.0/24 is directly connected, GigabitEthernet0/1
L       10.1.2.1/32 is directly connected, GigabitEthernet0/1
O       10.2.1.0/24 [110/648] via 192.168.10.2, 00:04:34, Serial0/0/0
O IA 192.168.1.0/24 [110/1295] via 192.168.10.2, 00:01:48, Serial0/0/0
O IA 192.168.2.0/24 [110/1295] via 192.168.10.2, 00:01:48, Serial0/0/0
     192.168.10.0/24 is variably subnetted, 3 subnets, 2 masks
C       192.168.10.0/30 is directly connected, Serial0/0/0
L       192.168.10.1/32 is directly connected, Serial0/0/0
O       192.168.10.4/30 [110/1294] via 192.168.10.2, 00:01:55, Serial0/0/0
R1#
```

Explain what type of routes are O*E2, O IA and O? Also mention which LSAs are used to find them.

OSPF configured router, intra area, router type 1

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```

Explain what type of routes are O*E2, O IA and O? Also mention which LSAs are used to find them.