

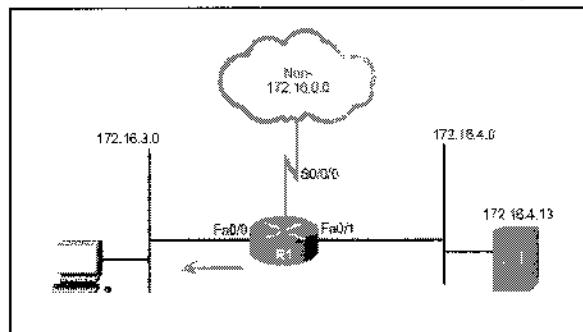
Kafrelsheikh University - Faculty of Engineering

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|----------|--|------|-----------|
| Course | Network Security | Date | 20/6/2021 |
| Time | 2 Hours | Mark | 40 |
| Students | 4 th year Computers and Systems | | |

Answer all the following questions:

Q1: In the following configuration:

- R1(config)# access-list 1 deny 172.16.4.0 0.0.0.255
- R1(config)# access-list 1 permit any
- R1(config)# interface FastEthernet 0/0
- R1(config-if)# ip access-group 1 out



- a- Explain each line in the configuration code. (4 Marks)
- b- What happens if the second line in the configuration code is omitted? Explain your answer. (3 Marks)
- c- What happens if the access list is moved as close to the source? Explain your answer. (3 Marks)

Q3. For the following configuration:

```
R1# conf t
R1(config)# username JR-MMIN password cisco12345
R1(config)# username ADMIN secret cisco84321
R1(config)# line con 0
R1(config-line)# login local
R1(config-line)# end
R1#
R1# show run | include username
username JR-ADMIN password 7 0E8586324F41584B564347
username ADMIN secret 5 $1$G2eQ5hEvad5iz75WJuSJvtzg8T0
R1#
```

- a. Explain the configuration code. (4 Marks)
- b. Explain the difference between the password and the secret commands. (3 Marks)
- c. Change the following code to enforce a minimum password length of 6. (3 Marks)

Q3. In the following Configuration.

```
R1# configure terminal
R1(config)* username ADMIN secret Cisco54321
R1(config)* line vty 0 4
R1(config-line)* login local
R1(config)*
R1(config)* login block-for 120 attempts 3 within 60
R1(config)* ip access-list standard PERMIT-ADMIN
R1(config-access-list)* remark Permit only Administrative hosts
R1(config-access-list)* permit 192.168.10.10
R1(config-access-list)* permit 192.168.11.11
R1(config)* exit
R1(config)* login quiet-mode access-list PERMIT-ADMIN
R1(config)* login delay 10
R1(config)* login on-success log
R1(config)* login on-failure log
R1(config)* exit
```

- a- Explain the configuration code. (4 Marks)
- b- Change the above configuration to allow ip address 192.168.32.12 to access the router in the Quiet mode. (3 Marks)
- c- In the above configuration, what will happen if the login delay is changed to 20 seconds? (3 Marks)

Q4: Explain the following terms of IPS Signature Alarms: (10 Marks)

- a- Pattern-Based Detection b-Anomaly-Based Detection c- Policy-Based Detection