

Informatikai ismeretek ágazati szakmai középszintű írásbeli érettségi (2020. május-június) hálózati ismeretek feladata (1. Home-Office-LAN)

https://dload-oktatas.educatio.hu/erettsegi/feladatok_2020tavasz_kozep/k_infoism_20maj_fl.pdf

Segédlet a megoldáshoz:

1.

Router: 2811

Switch: 2960-24

2.

WiFi Router: WRT300N

3.

```
SW_PAVO>enable
```

```
SW_PAVO#
```

```
SW_PAVO#configure terminal
```

```
SW_PAVO(config)#interface Vlan1
```

```
SW_PAVO(config-if)#ip address 192.168.11.254 255.255.255.0
```

```
SW_PAVO(config-if)#no shutdown
```

```
SW_PAVO(config-if)#exit
```

```
SW_PAVO(config)#ip default-gateway 192.168.11.1
```

```
SW_PAVO(config)#^Z
```

```
SW_PAVO#
```

4.

```
SRV_VIRGO/Config/FastEthernet0/IP Configuration
```

```
SRV_VIRGO/Config/Settings/Gateway DNS IPv4
```

```
PC_PAVO/Config/FastEthernet0/IP Configuration
```

```
PC_PAVO/Config/Settings/Gateway DNS IPv4
```

5.

```
RTR_PAVO/Config/Hostname
```

```
SW_PAVO/Config/Hostname
```

```
RTR_VIRGO/Config/Hostname
```

```
SW1_VIRGO/Config/Hostname
```

```
SW2_VIRGO/Config/Hostname
```

```
Router>enable
```

```
Router#configure terminal
```

```
Router(config)#hostname RTR_PAVO
```

```
RTR_PAVO(config)#
```

6.

```
RTR_PAVO>enable
```

```
RTR_PAVO#configure terminal
```

```
RTR_PAVO(config)#banner motd "Fejlesztés alatt"
```

```
RTR_PAVO(config)#
```

```
RTR_VIRGO>enable
RTR_VIRGO#configure terminal
RTR_VIRGO(config)#banner motd "Fejlesztés alatt"
RTR_VIRGO(config)#
```

7.

```
RTR_VIRGO#
RTR_VIRGO#configure terminal
RTR_VIRGO(config)#username rguser password 12345
RTR_VIRGO(config)#line vty 0 15
RTR_VIRGO(config-line)#login local
```

8.

```
RTR_PAVO#configure terminal
RTR_PAVO(config)#router ospf 1
RTR_PAVO(config-router)#network 10.11.12.0 255.255.255.252 area 0
RTR_PAVO(config-router)#network 192.168.11.0 255.255.255.0 area 0
RTR_PAVO(config-router)#network 192.168.12.0 255.255.255.252 area 0
RTR_PAVO(config-router)#passive-interface FastEthernet0/0
RTR_PAVO(config-router)#passive-interface FastEthernet0/1
RTR_PAVO(config-router)#exit
RTR_PAVO(config)#exit
RTR_PAVO#
```

```
RTR_PAVO#show ip protocols
```

```
RTR_VIRGO#configure terminal
RTR_VIRGO(config)#router ospf 1
RTR_VIRGO(config-router)#network 10.11.12.0 255.255.255.252 area 0
RTR_VIRGO(config-router)#network 172.16.11.0 255.255.255.0 area 0
RTR_VIRGO(config-router)#network 172.16.12.0 255.255.255.0 area 0
RTR_VIRGO(config-router)#passive-interface FastEthernet0/0
RTR_VIRGO(config-router)#passive-interface FastEthernet0/1
RTR_VIRGO(config-router)#exit
RTR_VIRGO(config)#exit
RTR_VIRGO#
```

```
RTR_VIRGO#show ip protocols
```

```
RTR_PAVO#show ip route
RTR_VIRGO#show ip route
```

9.

```
RTR_VIRGO#
RTR_VIRGO#configure terminal
RTR_VIRGO(config)#ip dhcp pool VIRGO1_LAN
RTR_VIRGO(dhcp-config)#network 172.16.11.0 255.255.255.0
```

```
RTR_VIRGO(dhcp-config)#default-router 172.16.11.1
RTR_VIRGO(dhcp-config)#dns-server 2.2.2.2
RTR_VIRGO(dhcp-config)#exit
RTR_VIRGO(config)#ip dhcp excluded-address 172.16.11.1 172.16.11.50
RTR_VIRGO(config)#exit
RTR_VIRGO#show running-config
```

10.

PC_VIRGO/Desktop/IP Configuration/DHCP

11.

WIFI_PAVO/GUI/Setup/Basic Setup/Network Setup/Router IP
WIFI_PAVO/GUI/Setup/Basic Setup/Network Setup/DHCP Server Settings

12.

WIFI_PAVO/GUI/Setup/Basic Setup/Wireless/Basic Wireless Settings
WIFI_PAVO/GUI/Setup/Basic Setup/Wireless Security

13.

TABLET_PAVO/Config/Wireless0
TABLET_PAVO/Config/Settings/Gateway DNS IPv4

14.

RTR_PAVO/Config/Save

```
RTR_PAVO#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
RTR_PAVO#
```

RTR_VIRGO/Config/Save

```
RTR_VIRGO#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
RTR_VIRGO#
```

SW_PAVO/Config/Save

```
SW_PAVO#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
SW_PAVO#
```

15.

```
RTR_VIRGO#
RTR_VIRGO#copy running-config tftp
Address or name of remote host []? 172.16.12.20
Destination filename [RTR_VIRGO-config]? virgo.config
```

```
Writing running-config....!!
[OK - 966 bytes]
```

```
966 bytes copied in 3.013 secs (320 bytes/sec)
RTR_VIRGO#
```

SRV_VIRGO/Services/TFTP

Hálózat működésének tesztelése

1.

```
RTR_PAVO#show ip protocols
RTR_VIRGO#show ip protocols
```

```
RTR_PAVO#show ip route
RTR_VIRGO#show ip route
```

2.

PC_VIRGO/Desktop/IP Configuration/DHCP

3.

```
PC_PAVO/Desktop/Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 172.16.12.20
```