

# NETWORKING (ANGOL NYELVŰ)

6. forduló

## NOKIA

A kategória támogatója: NOKIA

### Ismertető a feladathoz

The pandemic showed us the importance of telecommunication networks to keep us together and communicate.

Through technology leadership and trusted partnerships, Nokia deliver critical networks to help address global issues.

The following questionnaire will cover telecom specific networking topics.

Felhasznált idő: 00:00/10:00

Elért pontszám: 0/4

### 1. feladat 0/1 pont

What is the content of SDP? Which SDP can be valid?

#### Válasz

☒ Option 1:

```
v=0
o=anonym 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Exercise
i=SDP sample
u=http://www.nokia.com/sdp.pdf
e=anonymous@nokia.com (anonymous)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=audio 49170 RTP/AVP 0
m=video 51372 RTP/AVP 99
a=rtpmap:99 h263-1998/90000
```

Ez a válasz helyes, de nem jelölted meg.

☐ Option 2:

```
v=0
o=anonym 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Exercise
i=SDP sample
u=http://www.nokia.com/sdp.pdf
```

```
e=anonymous@nokia.com (anonymous)
c=IN IP4 224.2.17.12/127
a=recvonly
m=audio 49170 RTP/AVP 0
m=video 51372 RTP/AVP 99
a=rtpmap:99 h263-1998/90000
```

☐ Option 3:

```
v=0
o=anonym 2890844526 2890842807 IN IP4 10.47.16.5
u=http://www.nokia.com/sdp.pdf
e=anonymous@nokia.com (anonymous)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=audio 49170 RTP/AVP 0
m=video 51372 RTP/AVP 99
a=rtpmap:99 h263-1998/90000
```

☐ Option 4:

```
v=0
o=anonym 2890844526 2890842807 IN IP4 10.47.16.5
s=SDP Exercise
i=SDP sample
u=http://www.nokia.com/sdp.pdf
e=anonymous@nokia.com (anonymous)
c=IN IP4 224.2.17.12/127
t=2873397496 2873404696
a=recvonly
m=audio 49170 RTP/AVP 0
v=1
t=2899887645 8874328321
```

## Magyarázat

t=, s=, i= lines are mandatory

duplicated t=,v= lines are not allowed.

SDP - Session Description Protocol

[https://en.wikipedia.org/wiki/Session\\_Description\\_Protocol](https://en.wikipedia.org/wiki/Session_Description_Protocol)

## 2. feladat 0/0 pont

If you want to build up a 5G network using ONLY 5G elements using 3GPP terms, what is the correct answer?

### Válasz

☐ Option 1:

AMF, NRD, UPF, SMF, AUSF, UDM, UDR, NEF, SMSF, NPC, SCP, CHF

☐ Option 2:

AMF, NRD, UPF, SMF, AUSF, UDM, UDR, NEF, SMSF, NPC, SCP, CHF

- ☒ Option 3:  
AMF, NRD, UPF, SMF, AUSF, UDM, UDR, NEF, SMSF, NPC, SCP, CHF  
**Ez a válasz helyes, de nem jelölted meg.**
- ☐ Option 4:  
AMF, MSC, SGSN, GGSN, SMF, AUSF, UDM, UDR, NEF, SMSF, PCF, SCP, CHF
- ☐ Option 5:  
AMF, HLR, MME, UPF, SMF, AUSF, UDM, UDR, NEF, SMSF, PCF, SCP, CHF
- ☐ Option 6:  
AMF, MSS, SIGU, UPF, SMF, AUSF, GPU, PEM, NEF, SMSF, PCF, SCP, CHF

## Magyarázat

### Kedves Versenyzők!

A kérdést 0 pontosra állítottuk, mivel három válaszlehetőség ugyanazt a felsorolást tartalmazza.

Elnézést kérünk a kellemetlenségért!

Option 1 is wrong due to not 3gpp name ( using Nokia name )

- NRD : Nokia Repository Director; NRD makes NRF and NSSF functionalities in 3GPP
- NPC: Nokia Policy Control ..., PCF name is correct in 3GPP

Option 2 is wrong due to not 5G network element

- VLR : Visitor Location Registry - 2G/3G elements
- P-GW: LTE/4G element

Option 3 : correct

Option 4 : MSC, SGSN, GGSN – 3G

Option 5: HLR - 3G

MME – 4G

Option 6: GPU – Graphics processing unit. non telco related abbreviation.

PEM – public key, non telco related abbreviation

## 3. feladat 0/3 pont

Which of the following statements about network slicing are correct?

### Válaszok

- ☒ A 4G based core network allows a few network slices mainly based on dedicated core elements and specific radio and transport bearers  
**Ez a válasz helyes, de nem jelölted meg.**
- ☒ A 5G based core network allows a virtually unlimited number of network slices based on dedicated elements and shared portion of network with specific quality of services.  
**Ez a válasz helyes, de nem jelölted meg.**
- ☐ A 4G based core network allows up to 8 network slice connections per user equipment at a given time.
- ☐ A 5G based core network allows a virtually unlimited number of network slice connectons per user equipment at a given time.

## Magyarázat

Articles about 5G slicing:

<https://www.nokia.com/about-us/newsroom/articles/network-slicing-explained/>

[https://en.wikipedia.org/wiki/5G\\_network\\_slicing](https://en.wikipedia.org/wiki/5G_network_slicing)



[Legfontosabb tudnivalók](#)

[Kapcsolat](#)

[Versenyszabályzat](#)

[Adatvédelem](#)

© 2023 Human Priority Kft.

KÉSZÍTETTE **cone**

Megjelenés

Világos