Vendor: Nokia

Exam Code:4A0-M10

Exam Name: Nokia 5G Packet Core Architecture

Version: Demo

QUESTION 1

A connected UE moves from 5GS to EPS using the inter-system handover procedure with N26 interface. Which of the following actions is NOT performed?

A. Source gNB sends an NGAP Handover Required message to source AMF with handover type set to "NRtoLTE".

B. Source AMF obtains session management contexts stored in UDM+HSS for each PDU session that supports interworking.

C. Source AMF sends a Forward Relocation Request message to the target MME and provides session management contexts.

D. Indirect downlink data forwarding paths are established from source gNB to target eNodeB.

Correct Answer: B

QUESTION 2

The exhibit below displays a packet capture of the PFCP Session Modification Request message sent during a PDU Session Establishments procedure. What do the highlighted TEID and IP Address refer to?

```
Source      Destination     Protocol    Length  Info

SMF         UPF             PFCP        198     PFCP Session Modification Request
    Message Type: PFCP Session Modification Request (52)
    Length: 152
    SEID: 0x000000000001a100
    Sequence Number: 786434
    Spare: 0
  ✓ Update FAR : [Grouped IE]
        IE Type: Update FAR (10)
        IE Length: 62
    > FAR ID: Dynamic by CP 537198592
    ✓ Apply Action:
        IE Type: Apply Action (44)
        IE Length: 1
    > Flags: 0x02, FORM (Forward)
    ✓ Update Forwarding Parameters : [Grouped IE]
        IE Type: Update Forwarding Parameters (11)
        IE Length: 45
    > Destination Interface : Access
    > Network Instance : n3-default
    ✓ Outer Header Creation :
        IE Type: Outer Header Creation (84)
        IE Length: 10
        Outer Header Creation Description: GTP-U/UDP/IPv4  (256)
        TEID: 0x10000001
        IPv4 Address: 10.10.100.32 (10.10.100.32)
```

A. The N3 TEID allocated by gNB and the gNB IP address.

B. The N3 TEID allocated by UPF and the UPF IP address.

C. The N3 TEID allocated by SMF and the SMF IP address.

D. The N3 TEID allocated by SMF and the UPF IP address.

Correct Answer: D

QUESTION 3

Which of the following best describes the Secondary Node Addition procedure?

A. Used to transfer bearer contexts from the master eNB to the secondary gNB.

B. Used to establish a UE context at the gNB for a UE that supports option 3X.

C. Used to establish connectivity from the gNB to the EPC.

D. Used to establish an X2 connection between the eNB and gNB.

Correct Answer: D

QUESTION 4

An AMF needs to know when an SMF deregisters with the NRF. Which of the following NRF APIs should the AMF use?

A. Nnrf_NFManagement_NFUpdate Request

B. Nnrf_NFDiscovery_NFDiscover Request

C. Nnrf_NFManagement_NFStatusSubscribe Request

D. Nnrf_NFManagement_NFDeregister Request

Correct Answer: A

Reference: https://www.etsi.org/deliver/etsi_ts/123500_123599/123502/15.03.00_60/ts_123502v150300p.pdf

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QUESTION 5

Which of the following statements about the protection of service-based interfaces (SBIs) is FALSE?

A. The transport layer security (TLS) performs certification-based authentication, providing connection security between network functions within a PLMN.

B. The OAuth 2.0 framework is used to secure the communication between network functions within a PLMN at the network layer.

C. The network domain security/Internet protocol (NDS/IP) provides confidentiality and data integrity between network functions within a PLMN.

D. The security edge protection proxy (SEPP) handles the security of inter-domain SBIs and protects the interaction between network functions in different PLMNs.

Correct Answer: D

Reference: https://www.broadforward.com/security-edge-protection-proxy/

QUESTION 6

Which of the following actions is NOT performed when handling an uplink data packet?

A. UE maps the uplink data packet to a QoS Flow based on QoS rules received from SMF.

B. UE maps the QoS Flow identifier to a data radio bearer based on QFI-to-DRB mapping received from NG-RAN.

C. NG-RAN marks the data packet with the proper DSCP value.

D. NG-RAN removes the QoS Flow identifier from the packet header and forwards the packet over the proper N3 GTP-U tunnel.

Correct Answer: A

QUESTION 7

Which of the following statements about the 5G-globally unique temporary identity (5G-GUTI) is FALSE?

A. The 5G-GUTI provides a clear identification of the UE without revealing the UE permanent identity.

B. The 5G-GUTI contains an element identifying the AMF which allocated it.

C. The 5G network pages an idle UE using its 5G-GUTI.

D. During the initial registration procedure, the AMF allocates a 5G-GUTI and sends it to the UE.

Correct Answer: A

QUESTION 8

Which of the following actions is NOT performed during an Xn-based Inter NG-RAN Handover with I-UPF Insertion procedure?

A. AMF determines that a new I-UPF needs to be added for a PDU session.

B. SMF provides N3 tunnel info of I-UPF to target gNB via AMF.

C. SMF provides N9 tunnel info of UPF PSA to I-UPF.

D. SMF provides N9 tunnel info of I-UPF to UPF PSA.

Correct Answer: B

QUESTION 9

Which of the following statements about network slice selection assistance information (NSSAI) is FALSE?

A. Allowed NSSAI is a set of slices provided to UE by AMF during UE registration procedure.

B. Requested NSSAI is a set of slices provided by UE to the network and contains values from serving PLMN.

C. Subscribed NSSAI is a set of slices specified in the UE subscription data and contains only home PLMN values.

D. Configured NSSAI is a set of slices configured on the AMF and contains slices supported per tracking area.

Correct Answer: A

QUESTION 10

A UE is handed off from gNB1 to gNB2 using an N2-based handover procedure. The source I-UPF is to be relocated and an indirect data forwarding path is to be used. Which of the following statements is TRUE?

A. AMF decides that an in indirect data forwarding path is required and sends an indication to SMF.

B. gNB2 tunnel info is allocated for the indirect forwarding path and is included in the Handover Request Ack message sent to AMF.

C. Target I-UPF tunnel info is allocated for the indirect forwarding path and is provided to the UPF PSA.

D. UPF PSA tunnel info is allocated for the indirect forwarding path and is provided to the source I-UPF.

Correct Answer: A

QUESTION 11

Which of the following is NOT an EDCE5 core enhancement to support Option 3X?

A. Support for higher data rates for EPC interfaces.

B. MME selection of appropriate gateways capable of supporting NR.

C. PGW selection of appropriate PCRF that supports 5G policies.

D. Controlled UE access to NR based upon subscription information.

Correct Answer: A

QUESTION 12

A UE triggers an initial registration procedure to use services offered by a 5G network. Which of the following actions is NOT performed as a result of this procedure?

A. AMF interacts with AUSF to authenticate the UE.

B. AMF interacts with PCF to create an AM (access and mobility) policy association.

C. AMF retrieves the UE AM (access and mobility) and SM (session management) data from UDM.

D. AMF allocates a 5G-GUTI and includes it in the Registration Accept message sent to UE.

Correct Answer: C

Reference: https://www.sciencedirect.com/topics/engineering/registration-area