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Question: 1

Which of the following statements is FALSE regarding the eNodeB?

A. The eNodeBs maybe interconnect TEID with each other via anX2 interface.
B. The eNodeB is an element of the EPC core.
C. The eNodeBs are connected to the EPC core via the S1 interface.
D. During an IMSI attach, the eNodeB selects an MME to service the UE.
E. The eNodeB performs the compression and encryption of the user data stream.

Answer: B

Question: 2

Which of the following statements most accurately describes the MME?

A. The MME selects the SGW and the PGW for a given UE.
B. The MME is responsible for the bearer management.
C. The MME communicates with both the E-UTRAN and the EPC via GTP-C tunnels.
D. The MME performs the user authentication and authorization using the information provided by the HSS
E. All of the above answers are correct.
F. Only answers A, B and D are correct.

Answer: F

Question: 3

A UE needs to get an IP address before it can communicate to any PDN over the LTE network. Which of the following statements are FALSE regarding the process of the IP address allocation? (Choose two)

A. A PGW may obtain an IP address from a RADIUS server and assign it to the UE.
B. A PGW may assign the IP address from its local address pools.
C. An SGW may obtain a static IP address from the HSS server and assign it to the UE.
D. An SGW may obtain an IP address from a RADIUS server and assign it to the UE.
E. A PGW may obtain an IP address from a DHCP server and assign it to the UE.

Answer: C, D

Question: 4

Which of the following statements is TRUE regarding the IP connectivity between a UE and a PDN?

A. A UE gets an IPv4 address and/or an IPv6 prefix per APN.
B. A PGW forwards the UE's IP packets to the PDN based on the address of the PDN server.
C. When a UE sends an IP packet to a PDN over the EPC core, the eNodeB forwards the encapsulated packet to the SGW by looking into its IP routing table to determine how to reach the PDN server.
D. The SGW forwards the UE's IP packets to the PGW based on the address of the PDN server.
E. Only answers C and D are correct.
F. Only answers A and B are correct.

Answer: F

Question: 5

In a 3G network, which of the following is used to build a PDP context between a UE and the GGSN when a direct tunnel is not used?

A. An end-to-end GTP tunnel between the UE and the GGSN.
B. A Radio Access Bearer between the UE and the NodeB and a GTP tunnel between the NodeB and the GGSN.
C. A Radio Access Bearer between the UE and the SGSN and a GTP tunnel between the SGSN and the GGSN.
D. A Radio Access Bearer between the UE and the SGSN.
E. None of the above answers are correct.

Answer: C

Question: 6

Which of the following statements is FALSE regarding the EPS bearers?

A. The default bearer is initiated by either the UE or the PCRF.
B. The default bearer is always the first bearer established to an APN.
C. An AF server may initiate a dedicated bearer to a UE.
D. EPS bearers that connect a given UE to a single PGW may use different IP subnets.
E. The default bearer remains active throughout the lifetime of the APN connection.

Answer: A

Question: 7

Which of the following LTE interfaces are used for the communication of user data? (Choose one best answer)

A. The S1-MME interface and the S11 interface.
B. The S1-U interface.
C. The S5 interface.
D. The S1-U interface, the S5 interface and the LTE-Uu interface.
E. Only answers A, B and C are correct.
F. Only answers B and C are correct.

Answer: D

Question: 8

The S5 is the interface used for the communication between the SGW and the PGW. Which of the following transport protocols is used by this interface?

A. GTP/TCP
B. GTP/UDP
C. GTP/IP
D. GTP/SCTP
E. None of the above answers are correct

Answer: B

Question: 9

Based on the information shown in the exhibit, which of the following is the PLMN ID?

```
A:SGW# show mobile-gateway serving ue-context  imsi 302720123456789 detail

================================================================================
UE context detail
================================================================================
IMSI            : 302720123456789      State          : ACTIVE
MEI             : 987654321055550      MSISDN         : 003020161378488
Network MCC     : 302                  Network MNC    : 720
Tracking area id : 0x1011              Cell Id        : 0x1
NAI             : 0302720123456789@epc.mnc072.mcc302.3gppnetwork.org

GW/Group/Card   : 1/1/2                RAT            : EUTRAN
PDN contexts    : 1                    Bearers        : 1

S11 MME ctrl TEID: 0x325ac1            S11 SGW ctrl TEID: 0x4100800
S11 MME ctrl addr: 10.10.2.2
S11 SGW ctrl addr: 10.10.2.1
Charging SGW address   : 72.22.24.163

Inter ENB X2 HO  : 0                   Inter ENB S1 HO  : 0
S1 release procs : 0                   Paging Attempts  : 0
UE init svc req  : 0
--------------------------------------------------------------------------------
Number of UEs : 1
```

A. 302
B. 720
C. 123456789
D. 9876543
E. 30201613
F. 302720

Answer: F

Question: 10

Which of the following statements is FALSE regarding the Tracking Area (TA)?

A. A TA is a set of eNodeBs that are defined by a UE itself.
B. A TA is the smallest geographical area in which a UE can roam without performing a Tracking Area Update (TAU) other than periodic TAU as required.
C. A Tracking Area Identity (TAI) is used to identify each tracking area.
D. The Tracking Area Identity (TAI) is assigned by the service provider.
E. One TA may be served by one or more than one MME.

Answer: A

Question: 11

Which of the following statements is FALSE regarding the UE network attachment procedure?

A. The UE is served by an eNodeB.
B. The eNodeB selects one MME to serve the UE.
C. The MME selects one SGW to serve the UE.
D. The SGW selects one PGW to serve the UE
E. The PGW selects one PCRF server if required.

Answer: D

Question: 12

Which of the following statements is FALSE regarding the UE paging process?

A. The SGW performs downlink data buffering while the S1 bearer is being established.
B. The SGW initiates the paging messages towards the UE.
C. The PGW is not aware of the paging process.
D. The UE initiates the service request procedure once it receives the paging message.
E. The paging procedure is controlled by the MME.

Answer: B

Question: 13

Based on the information shown in the exhibit, when the SGW receives an IP packet from the UE, which of the following is the GTP TEID value expected to be received in the GTP packet header?

```
A:SGW# show mobile-gateway serving bearer-context imsi 302720123456789 detail

===========================================================================
Bearer context detail
===========================================================================
IMSI              : 302720123456789
APN               : ipd.alcatel-lucent.com
Bearer Id         : 5                    Bearer type      : Default
Up Time           : 0d 00:02:07

QCI/ARP           : 9/12
QoS UL MBR         : 0 Kbps               QoS DL MBR        : 0 Kbps
QoS UL GBR         : 0 Kbps               QoS DL GBR        : 0 Kbps

S5 PGW Data TEID : 0xd05025             S5 SGW Data TEID : 0x4b00805
S5 PGW Data addr : 10.10.7.2
S5 SGW Data addr : 10.10.7.1
S1U eNodeB TEID  : 0x21                 S1U SGW TEID     : 0x4b00825
S1U eNodeB addr  : 10.10.2.100
S1U SGW address  : 72.22.24.163

S5 UL packets      : 404532              S5 UL bytes       : 21906876
S1U DL packets     : 404514              S1U DL bytes      : 579961815
S11 QoS Modify    : 0
---------------------------------------------------------------------------
Number of bearer contexts : 1
===========================================================================
```

A. 0xd05025
B. 0x4b00805
C. 0x21
D. 0x4b00825
E. None of the above answers are correct.

Answer: D

Question: 14

Which of the following interfaces is not using the GTP-C protocol?

A. The X2 interface.
B. The S1-U interface.
C. The S4 interface.
D. The S5 interface.
E. TheSGi interface.

Answer: E