

HCIA-LTE-RNP&RNO V1.0

Huawei H35-560

Version Demo

Total Demo Questions: 11

Total Premium Questions: 117

Buy Premium PDF

<https://passqueen.com>

support@passqueen.com

Topic Break Down

Topic	No. of Questions
Topic 1, LTE Overview	2
Topic 2, LTE Network Architecture	4
Topic 3, LTE Air Interface Technology	26
Topic 4, LTE Key Technologies	13
Topic 5, LTE Radio Network Planning	27
Topic 6, LTE Radio Network Optimization	45
Total	117

QUESTION NO: 1

In the LTE TDD special subframe, which field is used as a guard period between downlink transmission and uplink transmission?

- A. DwPTS
- B. GP
- C. UpPTS
- D. CP

ANSWER: B

Explanation:

GP is correct. An LTE TDD special subframe consists of DwPTS, GP, and UpPTS. DwPTS is used for downlink transmission, while UpPTS is used for uplink transmission and may support functions such as random access or sounding reference signals. The Guard Period (GP) provides the time separation required when changing from downlink to uplink operation.

The GP accommodates propagation delay and radio equipment switching time, preventing downlink transmission from overlapping the uplink reception period. The special-subframe structure and its configuration are specified in [3GPP TS 36.211](#).

QUESTION NO: 2

For the same-frequency switching scenario, which of the following parameters has little effect on the handover?

- A. ofn
- True
- B. ocn
- False
- C. ofs
- D. ocs

ANSWER: A

Explanation:

ofn is the neighbor-frequency-specific offset used in the LTE measurement comparison underlying handover decisions. In a same-frequency (intra-frequency) handover scenario, the serving cell and the candidate neighbor cell operate on the same carrier frequency. Consequently, a frequency-specific neighbor offset does not provide meaningful differentiation between those cells and has little practical effect on which same-frequency neighbor fulfils the handover condition. Cell-specific offsets remain the relevant means of biasing measurement comparison among cells on that shared carrier.

This follows the LTE radio-resource-control measurement model, which distinguishes frequency-level offsets from cell-level offsets. Frequency offsets are intended to influence comparisons across frequencies, whereas intra-frequency mobility evaluates cells within a common frequency layer. Therefore, when optimizing same-frequency handover behavior, engineers normally focus on measurement event thresholds, hysteresis, time-to-trigger, and cell-specific mobility offsets rather than changing **ofn**. The LTE RRC measurement configuration and associated offsets are standardized in 3GPP TS 36.331; see the [3GPP TS 36.331 specification record](#) and the corresponding [ETSI TS 136 331 document](#).

QUESTION NO: 3

Which of the following types of warm wires are commonly used? (multiple choices)

- A. 1/2 " Feeder
- B. 1/3 " Feeder
- C. 7/8 " Feeder
- D. 5/4 " Feeder

ANSWER: A C D

Explanation:

The commonly used feeder sizes are **1/2 " Feeder**, **7/8 " Feeder**, and **5/4 " Feeder**. In LTE radio-site construction, "feeder" normally refers to the coaxial transmission line installed between the base-station radio equipment and the antenna system. Feeder selection is based chiefly on the required RF path loss, supported power, route length, mechanical installation constraints, and the antenna-system design. These three nominal diameters represent widely deployed coaxial feeder families: 1/2-inch cable is practical where flexibility and a smaller bend radius are important; 7/8-inch cable is a common main-feeder choice for lower attenuation over typical tower and rooftop runs; and 5/4-inch (1-1/4-inch) feeder is used where a larger, lower-loss cable is needed, especially on longer runs or higher-power paths. Huawei LTE site engineering practices require transmission-line components to be selected and installed according to the RF design and equipment specifications. Industry feeder catalogs similarly list 1/2-inch, 7/8-inch, and 1-1/4-inch corrugated coaxial cable as standard product sizes. See [Huawei Enterprise Support](#) and [CommScope wireless feeder cables](#).

QUESTION NO: 4

What are the following reasons that may cause Intra-LTE to fail to handover or fail to handover? (multiple choice)

- A. interference
- B. T301 timer configuration time is unreasonable
- C. The coverage is too poor, and the eNB cannot correctly demodulate the measurement report reported by the UE
- D. Neighbor Missing

ANSWER: A C D

Explanation:

Interference, excessively poor coverage that prevents the eNB from correctly demodulating a UE measurement report, and a missing neighbor relation can all cause an intra-LTE handover to fail or not be initiated. LTE mobility relies on reliable radio measurements and uplink/downlink radio signaling. High interference degrades SINR and can make measurement reporting, handover command delivery, random access to the target cell, or completion signaling unreliable. Poor serving-cell coverage can likewise prevent the measurement report from reaching the source eNB, leaving it without the information required to make a handover decision before radio-link conditions deteriorate.

A correctly configured neighbor relationship is also essential because the source eNB uses neighbor-cell information when evaluating and preparing a target cell for mobility. If the required target cell is absent from the neighbor configuration, the eNB may be unable to configure, select, or prepare that target for handover, even where the target has suitable coverage. These mechanisms follow the LTE RRC measurement and mobility procedures defined in [3GPP TS 36.331](#) and the LTE overall mobility architecture described in [3GPP TS 36.300](#).

QUESTION NO: 5

In the case of FTP download or upload (or packet filling) without manual intervention, the throughput rate should be maintained at this time. If there is a sudden drop, call drops may occur.

- A. True

B. False

ANSWER: A

Explanation:

True is correct. During a sustained file-transfer or packet-filling test with no user intervention, the radio bearer and data session are expected to remain established and to provide comparatively continuous user-plane throughput. A sudden, uncommanded reduction of throughput is therefore an important drive-test symptom: it can indicate deteriorating radio conditions, retransmissions, radio-link failure, an unsuccessful handover, loss of scheduling resources, or an interruption preceding release of the radio connection. If the interruption is not recovered through the applicable mobility or radio-resource-control procedures, the service session can be terminated and recorded as a call drop.

The statement appropriately treats a throughput collapse as a warning that a drop *may* occur, rather than claiming that every short throughput variation is itself a drop. In LTE radio-network planning and optimization, sustained transfer testing is used specifically to observe continuity, mobility behavior, and whether a connection remains available while traffic is active. LTE architecture and radio-resource-control behavior are defined in [3GPP TS 36.300](#), while the RRC connection, reconfiguration, and release procedures relevant to service continuity are specified in [3GPP TS 36.331](#).

QUESTION NO: 6

The insertion loss of the cavity power divider is larger than that of the microstrip power divider.

A. True

B. False

ANSWER: B

Explanation:

False is correct. A cavity power divider normally has lower insertion loss than a microstrip power divider at comparable operating frequencies and power-splitting ratios. Its RF paths are formed in a metallic cavity, where propagation is largely through air and conductor losses are low. In contrast, a microstrip divider uses printed transmission lines on a dielectric substrate. Dielectric dissipation, conductor loss associated with the printed traces, and radiation-related effects contribute to greater attenuation. This difference is important in LTE radio-distribution and antenna-feeder designs because insertion loss directly reduces the RF power delivered to downstream equipment or antenna ports. Cavity components are therefore commonly selected where low loss, high power handling, and robust RF performance are priorities, although they are usually larger and heavier than microstrip implementations. Typical product specifications illustrate this expected behavior: cavity-based RF power dividers are designed and marketed for low insertion loss, while microstrip designs must account for the losses of their PCB transmission-line structures. See the cavity-divider overview from [Pasternack](#) and the microstrip transmission-line discussion from [Microwaves101](#).

QUESTION NO: 7

The SINR of each codeword can be obtained through the Probe drive test tool, and the higher the SINR, the better.

A. True

B. False

ANSWER: A

Explanation:

True is correct. In LTE, signal-to-interference-plus-noise ratio (SINR) is a direct indication of the radio quality experienced by the receiver for a scheduled transmission. With spatial multiplexing, separate codewords may be transmitted, and the effective SINR can differ between those codewords because of channel conditions, antenna correlation, precoding, and

interference. Drive-test analysis tools such as Huawei Probe can display codeword-related radio measurements reported or derived from UE logging, allowing engineers to assess the quality of each transmission layer/codeword during field testing.

A higher SINR means that the wanted LTE signal is stronger relative to interference and thermal noise. This permits the network to select more efficient modulation and coding through link adaptation, typically increasing achievable user throughput and reducing transmission errors or retransmissions. SINR is therefore an important indicator when investigating coverage, interference, cell-edge performance, and MIMO performance. LTE physical-layer procedures use channel-quality information to support transmission-format selection, as specified by 3GPP in its physical-layer procedures specification: [3GPP TS 36.213 archive](#). Huawei's LTE product documentation and support resources are available through the [Huawei Enterprise Support portal](#).

QUESTION NO: 8

What are the functions of an LTE Sounding Reference Signal (SRS)? (Multiple choice)

- A. Estimate uplink channel conditions at the eNodeB
- B. Support uplink frequency-selective scheduling
- C. Support uplink link adaptation
- D. Carry uplink user-plane data
- E. Measure downlink RSRP at the UE

ANSWER: A B C

Explanation:

SRS enables the eNodeB to estimate uplink channel conditions over a configured frequency range and supports uplink scheduling decisions, including frequency-selective scheduling. Since an SRS can be configured over a wider bandwidth than a UE's currently allocated PUSCH resources, it provides the eNodeB with uplink channel information that is useful when selecting future uplink resource blocks.

SRS can also support uplink link adaptation by providing channel information relevant to scheduling and transmission decisions. It does not carry user-plane data, and it is not a downlink reference signal used by the UE for serving-cell RSRP measurement. LTE uplink reference-signal procedures are defined in [3GPP TS 36.211](#) and uplink scheduling procedures are specified in [3GPP TS 36.213](#).

QUESTION NO: 9

In an LTE network, an interface can be configured between eNODEB and MME. Which of the following is the interface name?

- A. S1
- B. S2
- C. X1
- D. X2

ANSWER: A

Explanation:

S1 is correct because it is the standardized LTE access-network interface connecting an evolved NodeB (eNodeB) to the Evolved Packet Core (EPC). More specifically, the eNodeB communicates with the Mobility Management Entity (MME) over the control-plane portion of this interface, named **S1-MME**. S1-MME carries Non-Access Stratum signaling between the user equipment and MME, as well as S1 Application Protocol signaling used for functions such as UE context management, initial context setup, paging, handover signaling, and release procedures. The user-plane portion of the overall S1 interface is S1-

U, which connects the eNodeB to the Serving Gateway rather than to the MME. Therefore, when the question asks for the interface configured between an eNodeB and an MME, the appropriate high-level interface name is S1. This LTE architecture naming is defined by 3GPP: the system architecture specification identifies S1 as the interface between E-UTRAN and EPC, while the S1 Application Protocol specification defines the control-plane procedures on S1-MME. See [3GPP TS 23.401 archive](#) and [3GPP TS 36.413 archive](#).

QUESTION NO: 10

Which of the following carrier bandwidths does LTE support? (multiple choice)

- A. 40M
- B. 5M
- C. 15M
- D. 20M

ANSWER: B C D

Explanation:

LTE supports scalable nominal channel bandwidths of 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, and 20 MHz. Therefore, 5M, 15M, and 20M are supported LTE carrier bandwidths. This scalable-bandwidth design enables LTE deployments to use differing amounts of contiguous radio spectrum while retaining the same fundamental OFDMA-based downlink and SC-FDMA-based uplink radio-access framework. In LTE specifications, these bandwidth configurations are associated with defined transmission bandwidths measured in resource blocks: a 5 MHz channel uses 25 resource blocks, a 15 MHz channel uses 75 resource blocks, and a 20 MHz channel uses 100 resource blocks. Network planning and optimization must select a bandwidth that matches the operator's licensed spectrum allocation and capacity requirements. The LTE physical-layer standard explicitly defines the supported channel bandwidth set and corresponding transmission bandwidth configurations. See 3GPP TS 36.101, [E-UTRA User Equipment radio transmission and reception](#), and the ETSI publication page for [TS 136 101](#).

QUESTION NO: 11

Which of the following causes the interference in the system? (Multiple choice)

- A. LTE TDD frame out of sync
- B. Interference caused by data configuration (time slot ratio, PCI, frequency)
- C. TDD ultra-long-distance interference (interference from DwPTS to UpPTS)
- D. Illegal use of LTE frequency bands

ANSWER: A B C D

Explanation:

LTE TDD frame out of sync, interference caused by data configuration (time slot ratio, PCI, frequency), TDD ultra-long-distance interference (interference from DwPTS to UpPTS), and illegal use of LTE frequency bands are all valid sources of LTE interference. TDD cells operating on the same or adjacent carriers require tightly aligned frame timing and compatible uplink/downlink configurations. A timing offset can cause one cell's downlink transmission to overlap another cell's uplink reception, raising uplink interference and degrading scheduling, throughput, and accessibility. Radio-parameter planning is equally important: unsuitable frequency reuse, Physical Cell Identity planning, or timeslot-ratio configuration can create co-channel, adjacent-channel, or synchronization-related interference conditions. In large-coverage TDD scenarios, propagation delay can allow a distant cell's downlink signal to arrive during the victim cell's uplink periods, including the UpPTS region; this is the classic ultra-long-distance TDD interference mechanism. Finally, unauthorized or uncoordinated transmitters using licensed LTE spectrum introduce external in-band interference, which can elevate the noise floor and impair service even

where network configuration is correct. LTE base-station requirements and TDD frame structures are specified by 3GPP; see [3GPP TS 36.104](#) and [3GPP TS 36.211](#).