DUMPSQUEEN

HCIA-5G-RAN V3.0 Exam

Huawei H35-480_V3.0

Version Demo

Total Demo Questions: 10

Total Premium Questions: 60

Buy Premium PDF

https://dumpsqueen.com

support@dumpsqueen.com

dumpsqueen.com

QUESTION NO: 1

The mmWave range is new for NR. It supports the largest bandwidth in a cell but has poor coverage capabilities. It requires high performance from RF components and generally applies only to line of sight (LOS) coverage.

A. True

B. False

ANSWER: A

Explanation:

The mmWave range is a new spectrum range for 5G NR, and it supports the largest bandwidth in a cell. However, it has poor coverage capabilities, as it requires high performance from RF components and generally applies only to line of sight (LOS) coverage. This makes it challenging to use in many applications, as it requires careful planning and implementation in order to ensure effective coverage.

5G Implementation Guidelines: NSA Option 3 - Future Networks

https://www.gsma.com/futurenetworks/wiki/5g-implementation-guidelines/

5G RAN - Radio Access Networks - Ericsson

https://www.ericsson.com/en/ran

Understanding mmWave for 5G Networks 1 - 5G Americas

https://www.5gamericas.org/wp-content/uploads/2020/12/InDesign-Understanding-mmWave-for-5G-Networks.pdf

The millimeter wave (mmWave) range is new for 5G NR (New Radio). It supports the largest bandwidth in a cell but has poor coverage capabilities. It requires high performance from RF components and generally applies only to line of sight (LOS) coverage.

The mmWave range is considered to be the higher frequency range of the 5G spectrum and it includes frequencies above 24GHz, such as 28GHz, 38GHz and 60GHz. These frequencies offer a large amount of bandwidth, which is necessary to support high-data rate services, such as ultra-high-definition video streaming, virtual reality, and the internet of things.

However, the mmWave range has poor coverage capabilities because the signals are easily blocked by obstacles such as buildings and trees, and they also have a shorter propagation distance than lower frequency bands. Therefore, mmWave range is generally used for high-density urban areas, and indoor environments.

Additionally, RF components for mmWave have to meet high performance requirements, such as high linearity, high gain and high power handling capability. Also, the mmWave signals are highly sensitive to the presence or absence of a clear line of sight (LOS) between the transmitter and the receiver, which makes it less reliable for non-line-of-sight (NLOS) coverage.

QUESTION NO: 2

Which of the following 5G massive MIMO scenarios is more suitable for high rise office building coverage?

A. H45V12

B. H25V25

C. H110V6

D. H45V6

ANSWER: C

Explanation:

H110V6 refers to a scenario where there are 110 horizontal and 6 vertical antenna elements installed on the gNodeB, which is ideal for providing coverage in high-rise office buildings. The high number of horizontal antenna elements allows for high-density deployment, which can improve the coverage and capacity of the network in these types of environments.

Reference:

QUESTION NO: 3

A larger CQI value indicates a better channel quality.

A. True

B. False

ANSWER: A

Explanation:

CQI (channel quality indicator) is a value that represents the channel quality of the wireless link between a UE (user equipment) and an eNodeB (base station) in an NR (New Radio) network. The UE reports the CQI value to the eNodeB, which uses it to determine the optimal coding scheme and modulation for the downlink transmissions to that UE.

A larger CQI value indicates better channel quality, higher link quality and a better signal-to-noise ratio. When the channel quality is good, the UE can report a larger CQI value, and the eNodeB can use a higher modulation and coding scheme to achieve higher data rate and better performance. On the other hand, when the channel quality is poor, the UE will report a smaller CQI value, and the eNodeB will use a lower modulation and coding scheme to reduce the error rate. It's worth noting that, the exact range of CQI values and the specific mapping between CQI values and modulation/coding schemes may vary depending on the specific network deployment, it's always recommended to refer to the official guide or document of the product for detailed and accurate information.

QUESTION NO: 4

Which of the following files must be prepared when remotely commissioning a gNodeB using the MAE Deployment? (Choose All that Apply)

A. Site deployment list

B. Data configuration file of the base station

C. Base station software package of the target version

D. Base station license

ANSWER: A B C D

Explanation:

A. Site deployment list: A document that provides information about the location and basic configuration of the gNodeB, including the site name, coordinates, azimuth, and antenna type. B. Data configuration file of the base station: A file that contains the detailed configuration information of the gNodeB, such as IP address, system parameters, and software version. It is used to configure the gNodeB remotely. C. Base station software package of the target version: A software package that contains the software version that needs to be installed on the gNodeB. D. Base station license: A license file that is required to activate and use the gNodeB.

QUESTION NO: 5

Which of the following methods can be used by a gNodeB to obtain downlink channel characteristics? (Choose All that Apply)

A. DMRS of the uplink PUSCH of the UE

B. Downlink DMRS signal

C. UE-reported uplink PMI

D. Uplink SRS signal

ANSWER: A B

Explanation:

The correct answers are A. DMRS of the uplink PUSCH of the UE and B. Downlink DMRS signal. According to the official Huawei documentation, gNodeBs can use downlink DMRS signals or the DMRS of the uplink PUSCH of the UE to obtain downlink channel characteristics. The downlink DMRS signals contain information about the downlink channel characteristics, and the DMRS of the uplink PUSCH of the UE can be used to measure the uplink channel characteristics. The uplink SRS and PMI signals reported by the UE are used to determine the uplink channel characteristics. For more information, please see this link: https://www.huawei.com/en/doc/NR-BBU-Design-V1.1/18104301/bbuf-cqi-report.html

QUESTION NO: 6

gNodeBs periodically send TPC commands to UEs over PDCCHs to control the transmit power of which of the following uplink channels or signals of UEs? (Choose All that Apply)

A. SRS

B. PUSCH

C. PUCCH

D. SS

ANSWER: B C

Explanation:

According to Huawei's official documentation, gNodeBs send TPC (Transmit Power Control) commands to UEs over PDCCHs to control the transmit power of PUCCH (Physical Uplink Control Channel) and PUSCH (Physical Uplink Shared Channel).

Reference:

QUESTION NO: 7

Which downlink data split modes are supported on the gNodeB side in the 5G NSA Option 3x architecture? (Choose All that Apply)

A. MCG_ONLY: only split to the MCG

B. SCG_AND_MCG: static data split

C. SCG_ONLY: only split to the SCG

D. SCG_AND_MCG: dynamic data split

ANSWER: A D

Explanation:

According to the Huawei SA Networking Product Design Guide (https://www.huawei.com/en/doc/e_huaweidoc/pdf/HW_051525), the downlink data split modes supported on the gNodeB side in the 5G NSA Option 3x architecture are A. MCGONLY: only split to the MCG and D. SCGANDMCG: dynamic data split. The MCGONLY mode is used when all the UE data must be sent to the same MCG, while the SCGANDMCG: dynamic data split mode is used when the data is split between multiple SCGs and MCGs.

QUESTION NO: 8

Which of the following NR slot configurations are defined in 3GPP specifications? (Choose All that Apply)

A. Mixed slot, which contains at least one downlink/uplink symbol while other symbols can be flexibly configured
Mixed slot is a slot configuration in which at least one downlink/uplink symbol is present, while other symbols can be flexibly configured for downlink or uplink transmission. This allows for a more efficient use of resources and better support for different types of services. B. Flexible-slot is a slot configuration in which all symbols are flexibly configured for downlink or uplink transmission. This allows for a more efficient use of resources and better support for different types of services. C. Downlink-only slot is a slot configuration in which all symbols are dedicated for downlink transmission, This configuration is mainly used for downlink-centric services such as video streaming or software downloads. D. Uplink-only slot is a slot configuration in which all symbols are dedicated for uplink transmission, this configuration is mainly used for uplink-centric services such as voice calls or video conferencing.

B. Flexible-slot (all symbols are flexibly configured)

C. Downlink-only slot (all symbols are dedicated for downlink)

D. Uplink-only slot (all symbols are dedicated for uplink)

ANSWER: A B C D

Explanation:

A. Mixed slot is a slot configuration in which at least one downlink/uplink symbol is present, while other symbols can be flexibly configured for downlink or uplink transmission. This allows for a more efficient use of resources and better support for different types of services. B. Flexible-slot is a slot configuration in which all symbols are flexibly configured for downlink or uplink transmission. This allows for a more efficient use of resources and better support for different types of services. C. Downlink-only slot is a slot configuration in which all symbols are dedicated for downlink transmission, This configuration is mainly used for downlink-centric services such as video streaming or software downloads. D. Uplink-only slot is a slot configuration in which all symbols are dedicated for uplink transmission, this configuration is mainly used for uplink-centric services such as voice calls or video conferencing.

QUESTION NO: 9

In NSA networking, which of the following commands can be used to check whether the SI-U interface is normal?

A. DSP S1INTERFACE

B. DSP SCTPLNK

C. DSP IPPATH

D. DSP GTPUECHO

ANSWER: B

Explanation:

The SI-U interface is a signaling interface between the 5G CN and the 5G RAN in NSA networking. It uses the SCTP (Stream Control Transmission Protocol) to transport the signaling messages between the 5G CN and the 5G RAN.

The DSP SCTPLNK command can be used to check the status of the SCTP links between the 5G CN and the 5G RAN, it can show the SCTP link status, local and peer IP address, local and peer port number, association status, and more.

QUESTION NO: 10

During a 5G service test, an NSA UE connects to the Probe and then accesses a 4G cell. It is found that the cell does not deliver B1 measurement configurations. Which of the following is not a possible cause for this?

A. The UE does not support EN-DC.

B. The NSA switch is not turned on.

C. Neighboring LTE cells and SCGs are not configured.

D. The B1 threshold is too high.

ANSWER: D

Explanation:

According to the official Huawei documentation, the possible causes for a 4G cell not delivering B1 measurement configurations during a 5G service test are that the UE does not support EN-DC, the NSA switch is not turned on, or neighboring LTE cells and SCGs are not configured.