



Question No: 1

In NSA networking, which of the following modes is used to anchor 5G NR?

- A. OGSM
- B. WCDMA
- C. CDMA
- D. LTE

Answer: D

Explanation:

The non-standalone (NSA) mode of 5G NR refers to an option of 5G NR deployment that depends on the control plane of an existing 4G LTE network for control functions, while 5G NR is exclusively focused on the user plane.[7][8] This is reported to speed up 5G adoption, however some operators and vendors have criticized prioritizing the introduction of 5G NR NSA on the grounds that it could hinder the implementation of the standalone mode of the network

Question No: 2

Which of the following devices is used to implement service slicing on the 5G RAN side?

- A. Antenna
- B. BBU
- C. AAU
- D. RRU

Answer: B

Explanation:

Question No: 3

E2E network device update is required for the evolution from 5G NSA networking to SA networking.

- A. True
- B. False

Answer: B

Explanation:

Question No: 4

5G wireless network cloudification can significantly improve the user rate.

- A. True
- B. False

Answer: A

Explanation:

Question No: 5



C-band is the most popular frequency band for 5G network deployment. However, there is an imbalance between uplink and downlink coverage — how much does this imbalance approximately amount to?

- A. 5dB
- B. 3dB
- C. 12dB
- D. 20dB

Answer: D

Explanation:

Question No: 6

F-OFDM over the NR air interface uses flexible subcarrier spacing to meet the requirements of different 5G service scenarios. Which of the following types of subcarrier spacing is not supported by Sub6G?

- A. 120KHz
- B. 15KHz
- C. 60KHz
- D. 30KHz

Answer: A

Explanation:

Question No: 7

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: B

Explanation:

Question No: 8

Which of the following statements about the NR slot structure are correct?

- A. Downlink slots can only be used to transmit downlink data.
- B. Downlink self-contained slots can be used to transmit uplink data and SRSs.
- C. The number of symbols in one slot is fixed to 14 regardless of the subcarrier spacing configuration.
- D. The symbols in a slot can be classified as downlink, uplink, or flexible.

Answer: C

Explanation:

Question No: 9

5G inherits the frame structure of 4G, but the slot length can be adjusted based on different SCSs.



Which of the following is not a 5G slot length?

- A. 0.5ms
- B. 10ms
- C. 0.25ms
- D. 1ms

Answer: B

Explanation:

Question No: 10

Which of the following parameters is related to the frequency-domain position of PBCH DMRSs?

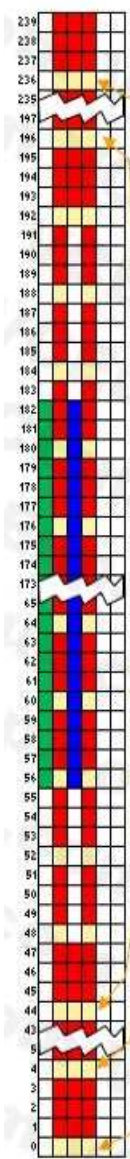
- A. Cell ID
- B. PCI
- C. SI-RNTI
- D. Bandwidth

Answer: A

Explanation:

The physical location (Resource Elements) of PBCH DMRS is determined as below. As you see here, the location shifts in frequency domain according to Physical Cell ID.





38.211- Table 7.4.3.1-1: Resources within an SS/PBCH block for PSS, SSS, PBCH, and DM-RS for PBCH

Channel or signal	OFDM symbol number l relative to the start of an SS/PBCH block	Subcarrier number k relative to the start of an SS/PBCH block
PSS	0	56, 57, ..., 182
SSS	2	56, 57, ..., 182
Set to 0	0	0, 1, ..., 55, 183, 184, ..., 236
	2	48, 49, ..., 55, 183, 184, ..., 191
PBCH	1, 3	0, 1, ..., 239
	2	0, 1, ..., 47, 192, 193, ..., 239
	1, 3	$0 + v, 4 + v, 8 + v, \dots, 236 + v$
DM-RS for PBCH	1, 3	$0 + v, 4 + v, 8 + v, \dots, 44 + v$
	2	$192 + v, 196 + v, \dots, 236 + v$

$$v = N_{ID}^{cell} \bmod 4$$

This indicates that PBCH DMRS location moves along frequency domain as Physical Cell ID changes

- PSS
- SSS
- PBCH
- PBCH DMRS

Question No: 11

SSB GSCN is the center frequency number of an NR cell.

- A. True
- B. False

Answer: B

Explanation:

Question No: 12

Which of the following NR slot configurations are defined in 3GPP specifications?

- A. Mixed slot, which contains at least one downlink/uplink symbol while other symbols can be flexibly configured
- 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: BC

Explanation:

Question No: 13

Which of the following channels (signals) can be used for cell measurement in NR?

A. DM-RS

B. CSI-RS

C. PT-RS

D. SSB

Answer: BD

Explanation:

<https://www.sciencedirect.com/topics/computer-science/channel-quality>

Question No: 14

At which layer is downlink data split implemented over the NR air interface in the NSA Option 3x architecture?

A. RLC layer

B. MAC layer

C. PDCP layer

D. Physical layer

Answer: C

Explanation:

Question No: 15

According to 3GPP specifications, which of the following is not an RRC state in 5G?

A. RRC_IDLE

B. RRC_ACTIVE

C. RRC_CONNECTED

D. RRC_INACTIVE

Answer: B

Explanation:

<https://devopedia.org/5g-ue-rrc-states>

Question No: 16

Which of the following actions are involved in NAS procedure management in 5G?



- A. Registration management
- B. RRC reestablishment
- C. Session management
- D. RRC connection setup

Answer: C

Explanation:

<https://www.techplayon.com/5g-nas-mobility-management-5gmm/>

Question No: 17

Which type of information about NR cells is carried in the neighboring NR cell MRs reported by UEs?

- A. RSRP
- B. MACCE
- C. PCI
- D. TA

Answer: AC

Explanation:

Question No: 18

Which of the following functions are implemented by the UBBP board in the BBU5900?

- A. Provides CPRI ports for communication with RF modules.
- B. Manages the configuration and devices for the base station.
- C. Monitors performance and processes signals for the base station.
- D. Processes uplink and downlink baseband signals.

Answer: AD

Explanation:

Question No: 19

What is the maximum number of PCIs supported by a 5G network?

- A. 1008
- B. 512
- C. 768
- D. 384

Answer: A

Explanation:



<https://www.5gworldpro.com/blog/2020/11/11/what-is-difference-between-pci-in-4g-lte-and-pciin-5g-nr/>

Question No: 20

If multiple IP addresses are planned for a gNodeB and the next-hop IP addresses are different, which of the following route configurations is more suitable?

- A. Source address route configuration
- B. Dynamic route configuration
- C. Destination address route configuration
- D. Direct route configuration

Answer: D

Explanation:

Question No: 21

Which of the following MML commands can be used to query version information relating to the software stored on the gNodeB?

- A. LST VER
- B. DSP SOFTWARE
- C. LST SOFTWARE
- D. LST PATCH

Answer: C

Explanation:

Question No: 22

Which of the following statements about the functions of an AAU are correct?

- A. Up/down conversion of spectrum
- B. Power amplification
- C. Signal filtering
- D. Baseband data processing
- E. Analog-to-digital/digital-to-analog conversion

Answer: DE

Explanation:

Question No: 23

Which of the following RF modules support 64T64R?

- A. AAU5619
- B. AAU5313
- C. RRU5901



D. AAU5613

Answer: AD

Explanation:

Question No: 24

Which of the following files must be prepared when remotely commissioning a gNodeB using the MAE Deployment?

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: AC

Explanation:

Question No: 25

The BBU5900 uses a modular design. Which of the following subsystems constitute the BBU?

A. Main control subsystem

B. Transmission subsystem

C. Baseband subsystem

D. RF subsystem

Answer: ABC

Explanation:

Question No: 26

If the length of the CPRI optical fiber between a BBU and an RRU exceeds 150 m, you are advised to use a multimode fiber.

A. True

B. False

Answer: A

Explanation:

Question No: 27

What is the maximum MIMO mode supported by Huawei 5G indoor CPE?

A. 4T8R

B. 2T2R

C. 2T4R

D. 4T4R



Answer: D

Explanation:

Question No: 28

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: AC

Explanation:

Question No: 29

In the inter-site DC solution, the X2 interface can be used to implement transmission interconnection between the LTE and NR sites. Which of the following is the requirement of the transmission delay in such case?

- A. <40ms
- B. <10ms
- C. <30ms
- D. <20ms

Answer: D

Explanation:

Question No: 30

In SA networking, the mobile country code (MCC) and mobile network code (MNC) information added on the gNodeB must be consistent with the PLMN information on the core network.

- A. True
- B. False

Answer: A

Explanation:

Question No: 31

After the NR base station commissioning is complete and before services go online, which of the following must be set for the NE status?

- A. Normal
- B. New
- C. Upgrade
- D. Testing

Answer: A



Explanation:

Question No: 32

Which of the following MML commands is used to bind a physical sector to an AAU on a gNodeB?

- A. ADD NRCELL
- B. ADD NRDUCELLCOVERAGE
- C. ADD SECTOR
- D. ADD NRLOCELL

Answer: C

Explanation:

Question No: 33

Which of the following is the recommended sequence for configuring data during gNodeB commissioning?

- A. Transport data - Radio data - Device data - Basic data
- B. Device data - Transport data - Radio data - Basic data
- C. Basic data - Radio data Device data - Transport data
- D. Basic data - Device data - Transport data - Radio Data

Answer: C

Explanation:

Question No: 34

When you add tracking area information on a gNodeB, an operator ID is bound.

- A. True
- B. False

Answer: A

Explanation:

Question No: 35

Which of the following is the correct sequence for adding gNodeB hardware?

- A. RF unit -> Subrack -> Board -> Cabinet
- B. Board -> Cabinet -> Subrack -> RF unit
- C. Cabinet -> Subrack -> Board -> RF unit
- D. Subrack -> Board -> Cabinet -> RF unit

Answer: A

Explanation:



Question No: 36

Which of the following methods can be used to obtain VLAN IDs after a base station is powered on?

- A. VLAN scanning
- B. Configuration on LMT
- C. Remote DHCP assignment
- D. VLAN detection

Answer: D

Explanation:

Question No: 37

Which downlink data split modes are supported on the gNodeB side in the 5G NSA Option 3x architecture?

- 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

Explanation:

Question No: 38

On an NSA network, the eNodeB immediately triggers the SgNB addition procedure after a UE attaches to the LTE network. If the SgNB addition fails, the eNodeB attempts to add the SgNB again until it is successful.

- A. True
- B. False

Answer: A

Explanation:

Question No: 39

Which of the following factors trigger measurement in connected mode in SA networking?

- A. Periodic TAU
- B. Whether or not the UE is moving
- C. Whether or not neighboring frequencies are configured
- D. Signal quality of the serving cell

Answer: B

Explanation:

Question No: 40



After the cell search is complete, a 5G UE automatically selects a PLMN based on the priority sequence. Which PLMN will the UE preferentially select for registration?

- A. U-PLMN
- B. RPLMN
- C. HPLMN
- D. EHPLMN

Answer: A

Explanation:

Question No: 41

An NR CQI value represents a coding scheme and coding efficiency. How many bits does a CQI value reported by a UE have?

- A. 32
- B. 8
- C. 4
- D. 16

Answer: C

Explanation:

Question No: 42

Which of the following signals is measured by a 5G UE to report channel quality information such as the CQI, RI, and PMI to a gNodeB?

- A. SSB SINR
- B. CSI-RS SINR
- C. SSB RSRP
- D. CSI-RS RSRP

Answer: B

Explanation:

Question No: 43

A larger CQI value indicates a better channel quality.

- A. True
- B. False

Answer: A

Explanation:

Question No: 44

Which of the following methods can be used by a gNodeB to obtain downlink channel characteristics?



- A. DMRS of the uplink PUSCH of the UE
- B. Downlink DMRS signal
- C. UE-reported uplink PMI
- D. Uplink SRS signal

Answer: A

Explanation:

Question No: 45

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: D

Explanation:

Question No: 46

Which of the following NR channels or signals supports static and dynamic power control?

- A. PDCCH
- B. PUSCH
- C. SS
- D. PBCH

Answer: A

Explanation:

Question No: 47

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?

- A. SRS
- B. PUSCH
- C. PUCCH
- D. SS

Answer: C

Explanation:

Question No: 48



The RSRP value of the test terminal can be viewed on the GENEX Probe. Which of the following test results indicate good signal quality?

- A. 30 to 60dBm
- B. -60dBm to -90dBm
- C. 0 to 60dBm
- D. -30 to -60dBm

Answer: D

Explanation:

Question No: 49

Which of the following frequency locking modes is not supported when the GENEX Probe is used to perform a CPE test?

- A. ARFCN
- B. PCI
- C. Cell frequency
- D. BAND

Answer: D

Explanation:

Question No: 50

In what scenarios is GENEX Assistant typically applied?

- A. Wireless network adjustment
- B. Single site verification
- C. Batch processing of gNodeB alarms
- D. Routine network optimization

Answer: C

Explanation:

Question No: 51

The purpose of replaying logfiles is to reproduce the test process. The GENEX Probe can work without license in this case.

- A. True
- B. False

Answer: A

Explanation:

Question No: 52

What are the typical sizes of ping packets and intervals in single site verification?



- A. 1500 bytes, 2s
- B. 1500 bytes, 1s
- C. 32 bytes, 1s
- D. 32 bytes, 2s

Answer: B

Explanation:

Question No: 53

During single site verification, which of the following messages can be traced by the Probe to analyze problems?

- A. L3 Messages
- B. Xn Messages
- C. L1 Messages
- D. NG Messages

Answer: C

Explanation:

Question No: 54

Which of the following can be used to check whether an antenna is reversely connected during NR single site verification?

- A. Fixed-point CQT
- B. DT around the site
- C. Transmission test
- D. VSWR test

Answer: C

Explanation:

Question No: 55

During 5G single site verification, you only need to test the user access and rate. Other test items are analyzed in drive tests.

- A. True
- B. False

Answer: B

Explanation:

Question No: 56

According to 5G eMBB service requirements, which of the following is the minimum rate required for network edge coverage?

- A. 1 Gbps



B. 100Mbps

C. 1Mbps

D. 10Gbps

Answer: B

Explanation:

Question No: 57

During a 5G test, a portable computer is directly connected to the LAN port of the Huawei CPE through a network cable to obtain a dynamic IP address for communication.

A. True

B. False

Answer: B

Explanation:

Question No: 58

What is the required distance between a CPE and a gNodeB in a 5G network test?

A. Less than 10m

B. Greater than 5m

C. Less than 5m

D. Greater than 10m

Answer: B

Explanation:

Question No: 59

Which of the following messages is the first message sent by a gNodeB to an AMF?

A. NGAP_UL_NAS_TRANSP

B. RRC_SETUP

C. NGAP_INIT_CONTEXT_SETUP_RSP

D. NGAP_INIT_UE_MSG

Answer: C

Explanation:

Question No: 60

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: C

Explanation:

