

Which of the following is used to achieve anonymity in GSM networks?

Select one:

- a. Anonymous Authentication Number
- b. Unique Verification Number
- c. SIM Module Number
- d. International Mobile Subscriber Identity
- e. Temporary Mobile Subscriber Identity





8

answered

out of

question

Which of the following is an attack channel unique to mobile devices?

Select one:

- a. SMishing
- b. Spear-Phishing
- c. Phishing
- d. Denial of Service (DoS)
- e. Spyware



Information Technology

which of the following are added as a new feature to the Evolved Node B (eNB) in 4G LTE Networks compared to 3G UMTS Networks? (Select Two)

Select one or more:

- a. Modulation and Demodulation of radio signals
- b. Radio connection with the User Equipment
- c. Negotiate User Level Quality of Service
- d. Act as the air interface to connect mobile phones to the mobile network
- e. Ciphering/deciphering of user and control plane data

Match the correct mobile wireless technology to the description.

Also known as UMTS

Incorporates a text messaging service for the first time.

Also known as High Speed Downlink Packet Access (HSDPA)

Also known as 'Long Term Evolution'

Also known as Enhanced Data rates for GSM Evolution (EDGE)

Expected to achieve data rates closer to 1 Gbps

Offered 2.4 to 5.8 GHz

3G

2G

3.5G

4G LTE

2.75G

5G

1G

Which of the following are reasons to use RAKE antennas in 3G? (Select Two)

Select one or more:

- a. Due to buildings, hills and objects signal pulses are spread over time.
- b. Received pulse can be eavesdropped by a man in the middle
- c. Received pulse is already amplified at the reception of RAKE
- d. Received pulse is distorted (always) because of the frequency and delay response of the channel.
- e. Received pulse can be overlapped with adjacent cells



20

answered

out of

question

GSM may outlive 3G as a mobile communication technology.

Select one:

- True
- False



What are the specific functions used in Android Activity lifecycle?

Select one or more:

a.

onResume()

b.

onFreeze()

c.

onCreate()

d.

onPause()

e.

onStart()



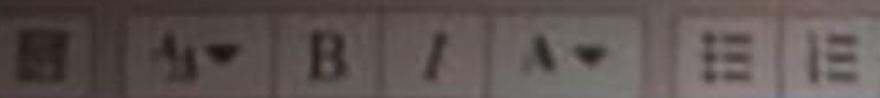
Which of the following is not a potential consequence of breaking the A5 cipher?

Select one:

- a. SIM Corruption
- b. Monitoring Data Transfers
- c. Intercepting calls
- d. Cloning of Cell Phones
- e. Decoding calls



Differentiate Linear Layout from Relative Layout.



+

Linear - Type of view group which is responsible for holding views in it either Horizontally or vertically
Relative - is a layout in which we can arrange views/widgets according to the position of other view/widgets



See all photos

+ Add to



Edit & Create



Online Exams

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Select true if the following listed are android "services".

Navigating to the a Different Screen

False

Updating the Virus Guard

True

music in the background while the user is in a different application or it might fetch data over the network without blocking user interaction with an activity.

True

Quarantining a File

True

Receiving a Message

False



ion 3

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ng question

Which of the following is not a way to guess a known plain-text of a GSM stream?

Select one:

- a. System Information
- b. Auth Response
- c. Empty ACKS
- d. Connect ACK
- e. IDLE frames

Question 15
Not yet answered
Marked out of
1.00
 Flag question

How to be safe from Android malware?

Select one or more:



a.
Be cautious when apps are requesting more permissions than what they really need. For example, a notes app asking for READ_SMS permission is something suspicious.



b.
Make sure that you update your devices as soon as there is an update released



c.
Use an anti-malware application.



d.
Do not blindly accept permissions requested by the Apps.



e.
Always install apps from official market places (Play Store)



f.
Try not to place too much of sensitive information on the phone

Mobile Threats

Match the correct security risk to mobile threat category.

A spyware collecting personal data as part of a game installed in the mobile device

Application-Based Threat

Connecting to a Rouge Access Point

Network Threat

Attacker exploiting an execute code vulnerability

Operating System Based Threat

A drive by download when browsing the Chrome App

Web-based Threat

A thief stealing the phone

Physical Threat

+ Add to



Edit & Create

Which of the following is NOT true regarding GSM, 3G & 4G Security?

Select one:

- a. GSM, 3G & 4G all need the UE and the Home Network to maintain a shared secret key
- b. GSM, 3G & 4G allow users to authenticate to a visited network using a challenge response protocol
- c. GSM and 3G provide confidentiality while 4G provides confidentiality and integrity both for user data
- d. Unlike GSM and 3G, 4G create an extended key hierarchy
- e. GSM, 3G & 4G all use Home network generated data to verify the user at visited network

See all photos

+ Add to



Edit & Create

Share



Fill the 3G Authentication Process given below with Missing Words

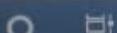
- Network starts the authentication procedure by sending the User Authentication Request with the parameter RAND and AUTN.

After UE receives these parameters, the USIM first computes the anonymity key AK = f5K (RAND) and retrieves the SQN = (SQN ⊕ AK) ⊕ AK

- After that UE computes XMAC = f1K (SQN || RAND || AMF) and compares with MAC .
- If both are different UE send user authentication reject back to the VLR/SGSN.
- If the USIM finds the SQN is not in the correct range, it sends synchronization failure.
- UE sends expected response RES to the VLR/SGSN.
- If RES = XRES , then the authentication procedure completes



Type here to search



81°F

7:49 PM
6/13/2021

Which of the following is not true about A5 encryption versions.

Select one:

- a. A5/0 allows GSM to operate without encrypting call traffic
- b. A5/2 is used mainly outside of Europe and US
- c. A5/4 is the encryption standard used in 4G LTE
- d. A5/3 is a stronger version of A5, for use in 3G networks
- e. A5/1 is the original A5 algorithm

PSTN stands for:

Select one:

- a. Primary Service Telephone Network
- b. Public Switched Telephone Network
- c. Primary Service Telephone Nodes
- d. Public Systems Telephone Nodes
- e. Private Switched Telephone Network

In 3G networks, user data is encrypted. However signalling data is unencrypted.

Select one:

- True
- False



NetExam

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28

answered

out of

question

Mobile subscribers do not have access to the International Mobile Subscriber Identity (IMSI) number.

Select one:

- True
- False



Which of the following is not true about "Bring Your Own Device" concept.

Select one:

- a. BYOD provides fast access to corporate data
- b. It's impossible to implement security policies to control BYOD
- c. A company should define minimum required security controls for BYOD devices
- d. BYOD poses a security challenge to corporate network

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Android the launcher activity is the activity that is started when a user clicks on the icon for an application. You can determine the manifest. Some parts are missing in the code. Fill them with the given words below.

```
<activity android:name=".LauncherActivity" >
```

```
    <intent-filter>
```

```
        <action android:name="android.intent.action.MAIN" >/>
```

```
        <category android:name="android.intent.category.LAUNCHER" >/>
```

```
    </intent-filter>
```

```
</activity>
```

University of Information Technology

Which of the following statements are true about 3G UTRAN Architecture? (Select Two)

Select one or more:

- a. In 3G Base Transceiver Station (BTS) is evolved into an Enhanced Base Station called Node B
- b. There is a logical connection between Radio Network Controllers (RNC) to support mobility
- c. Hand-over process in 3G is identical to GSM architecture
- d. UTRAN Base Station only supports Frequency Division Duplexing (FDD)
- e. Due to the increased mobility Visitor Location Register (VLR) is not part of the UTRAN architecture



Match the correct android resource to the given text.

This folder consists of raw resources that are required by the application. Examples would be images such as app icons.

Res

This folder contains the application certificate along with the SHA1 digests of all the files used in the application.

META-INF

This file holds most of the configuration details about the app. It also includes the package name, details about the app components that are used in the app, security settings for each app component, permissions that are requested by the application, and so on.

AndroidManifest.xml

This file contains the Dalvik Bytecode generated from the source code written by developers. This file is what is executed on the device when the app runs. This file can be manually generated and executed on an Android device.

classes.dex

This folder allows a developer to place the files of his interest such as music, video, preinstalled databases, and so on. These files will be bundled with the app.

Assets

This file holds the compiled resources.

resources.arsc

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Drop the correct term into the paragraph.

When a subscriber uses the , to make a call in the network, it transmits the call request to the . This location contains all the radio equipment (i.e., antennas, signal processing devices, and amplifiers) necessary for radio transmission within a geographical area called a . The is responsible for handling the hand-off between towers.



+ Add to



Edit & Create



Which of the following is the least appropriate security mechanism for mobile device protection?

Select one:

- a. Remote Wiping Controls
- b. Location Based Security Controls
- c. Bio-metrics/Pass code Controls
- d. Mobile Device Encryption Controls
- e. Physical Security Controls

Select the correct order of GSM authentication process.

Mobile station, requests access to the network. This is achieved via an authentication request, in which the mobile device sends out the IMSI as a request for authentication.

After the reception of the IMSI by the AuC, a random number (RAND) is generated using the received IMSI and the stored secret key Ki.

MSC then forwards the RAND number of the generated triplets to the mobile station.

The IMSI is broadcasted to a corresponding MSC, which in turn forwards this information to the HLR in the home network, and also the VLR in the visited network.

Mobile station calculate the same response generated by the AuC with the use of the algorithms, the RAND number and Ki key are used to calculate the RES and a Kc.

HLR sends out an authentication response known as triplets, which consists of the (RAND, XRES and Kc).

XRES is then forwarded to the MSC/VLR, and a comparison of RES and XRES is made.

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MS 021.jpg

See all photos + Add to

Search icon, Copy icon, Heart icon, Share icon, Print icon

Edit & Create, More options

Match the description to correct term.

System level management of co-channel interference, radio frequencies, and other radio transmission characteristics in wireless communication systems.

Enables the serving networks to locate a mobile subscriber's point of attachment and maintain a mobile subscriber's connection as it continues to change its point of attachment.

A mobile subscriber's current point of attachment.

Resource Management

Mobility Management

Base Transceiver Station

Next

8:17 PM 8/13/2021

True or false?:

Users don't need apps that guard their Android devices against malware.



Select one:

True

False

Which of the following is not a field generated by the HLR during the 3G UMTS Authentication Process?

Select one:

- a. Cipher Key
- b. USIM Key
- c. MAC
- d. Integrity Key
- e. XRES

Which of the following is NOT true regarding 3G and 4G?

Select one:

- a. In 4G users can verify the integrity of the received authentication challenge
- b. In both 3G and 4G users are notified whether security is ON or OFF
- c. In 4G users can verify the identity of the eNodeB using certificates
- d. In 3G users can verify the integrity of the received authentication challenge
- e. In 3G users can verify the identity of the NodeB using certificates



GSM Networks does not provide any data integrity whereas 3G UMTS has an inbuilt data integrity solution.

Select one:

- True
- False

Question 10

Not yet answered

Marked out of

1.00

Flag question

What are the commands supported by adb?

Select one or more:



a.

adb push [file on the local machine] [location on the device]

b.

adb destroy [file]

c.

adb remove [filename.apk]



d.

adb pull /data/local/tmp/test.txt

e.

adb pull [file]

Which of the following technique is used to achieve core network security in 4G architecture?

Select one:

- a. End to End Encryption
- b. NAS Key
- c. IPSec
- d. Cipher Key & Integrity Key
- e. VPN

Which of the following is not an advantage of 'New Key hierarchy in 4G LTE' networks?

Select one:

- a. Fast Key Changes
- b. Authentication & Key Agreement (AKA) process takes less time and resources
- c. Fast handovers
- d. The damage of an attack is lessened due to localization
- e. Extra complexity added to security

explain the two ways of Traffic analysis for android devices



Passive - Record traffic for a period of time then analyse later using tools like tcpdump, wireshark etc..

Active - Analyse live traffic in real-time using tools such as BurpSuite, MITM Proxy



What does the acronym ISDN stand for?

Select one:

- a. International Standard for Digital Networks
- b. Integrated Switched Digital Network
- c. Integrated Switched Data Network
- d. International Service Digital Networks
- e. Integrated Services Digital Network



Undergraduate Department of Information Technology

correct description to the Mobile Operating System

The Symbian operating system provides multitasking and supports specialized input devices that have been adopted by RIM and Nokia in its handhelds, particularly the trackwheel, trackball, trackpad and touchscreen.

The iOS mobile operating system, originally developed for the iPhone, it has since been extended to support other Apple devices.

A discontinued family of mobile operating systems developed by Microsoft for smartphones and Pocket PCs.

A discontinued mobile operating system and computing platform designed for smartphones commonly used in the early 2000s by Nokia & Sony Ericsson.

Android

BlackBerry

iOS

Windows Phone

Symbian

Android

Which of the following is a disadvantage of 4G LTE Networks?

Select one:

- a. Limited Bandwidth due to High Frequency Range
- b. High Latency due to High Frequency Range
- c. Low Latency due to High Frequency Range
- d. Limited Mobility due to High Frequency Range
- e. Limited Coverage due to High Frequency Range

QUESTION

Which of the following is **not** a technology used in 4G LTE physical layer to enhance the data rate?

Select one:

- a. Non-orthogonal multiple access (NOMA)
- b. Multiple Input Multiple Output (MIMO)
- c. Single-carrier FDMA
- d. Orthogonal frequency-division multiple Access(OFDMA)
- e. Orthogonal frequency-division multiplexing (OFDM)

+ Add to



File Edit Create Share

TECHAD III

Sri Lanka Institute of Information Technology

Integrity protection not available for the user plane data inside the 4G LTE network.

Select one:

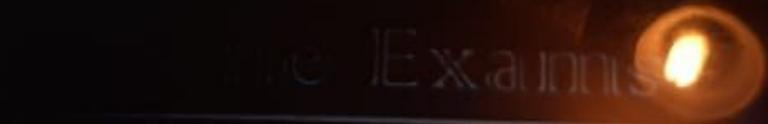
- True
 False



GSM uses a combination of Time- and Frequency-Division Multiple Access (TDMA/FDMA).

Select one:

- True
- False



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If you are in need to exploit an android application as a reverse engineer, what are the steps that needs to take exploit that?



1. Decompile using APK tool using command - apktool d xxx.apk
2. Now give the ls to view the decompiled files, we can view the manifest.xml file using VIM, to view the dex file we need to do the below
3. Convert dex file to java archive .jar file using command - dex2jar classes.dex
4. Now we analyse this .jar file using jd-gui using command -> jd-gui classes_dex2jar.jar
5. Now we use the jd-gui java decompiler for the java file analysis
6. We can find weaknesses from the observed java files and then exploit the discovered weaknesses.



Match the correct term in 3G Key Generation process.

Used by the UE to verify the integrity of the received authentication data

XMAC
XRES

Generated by the HLR and forwarded to the VLR for comparison

Choose
RES

Generated by the UE and forwarded to the VLR for comparison

Choose
SQN

Generated by HLR to create a unique MAC

Choose

Which of the following is a 'logical' connection in 3G architecture?

Select one:

- a. Connection between the MSC and GMSC
- b. Connection between the neighboring RNCs
- c. Connection between the RNC and MSC
- d. Connection between the MSC and EIR
- e. Connection between the NodeB and RNC

Which of the following is Not true?

Select one:

- a. Both 3G and 4G authentication use an authentication token for verification
- b. Both 3G and 4G authentication use challenge and response mechanism
- c. Both 3G and 4G authentication use a master key for key generation
- d. Both 3G and 4G authentication use RAND value generated by Home Network
- e. Both 3G and 4G authentication use an extended key hierarchy

Which of the following is not an advantage of wireless communication?

Select one:

- a. Faster deployment
- b. Service is mobile therefore accessible from anywhere
- c. Enhanced security compared to wired infrastructure
- d. Can be deployed in any environment

which of the following components are not part of management databases that support roaming users?

Select one or more:

- a. EIR
- b. BSC
- c. HLR
- d. VLR
- e. AuG

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In 4G LTE Networks a cryptographic certificate based approach is used to maintain the authenticity of eNBs.

Select one:

- True
- False

Unlike GSM, in 3G Networks IMSI is protected and is never transferred in clear text.

Select one:

True

False

Which of the following is not correct regarding the eSIM?

Select one:

- a. Can be programmed with a SIM profile over the internet and eliminates the need to insert a SIM card in to the Phone
- b. Provides network connectivity without the need for a physical SIM card
- c. It is a programmable chip built in to the device itself
- d. Due to its nature it is impossible to provide network authentication

**Question 6**

Not yet answered

Marked out of
1.00

Flag question

What are the msfvenom options available? (Select two)

Select one or more:

 a.

-a, attack

 b.

-p, --payload

 c.

-d, --dump

 d.

-f, --format

 e.

-v, verbose



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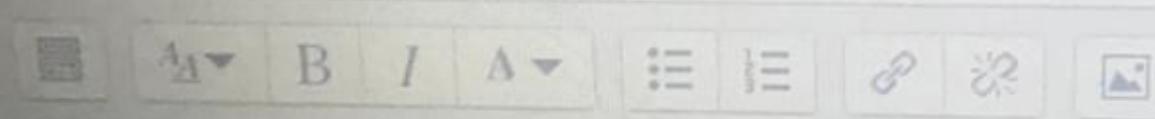
11

answered

1 out of

question

Describe what is a SMALI file and usage of it.



SMALI file is a human readable version of Dalvik byte code.

It contains the assembly language between high level

I

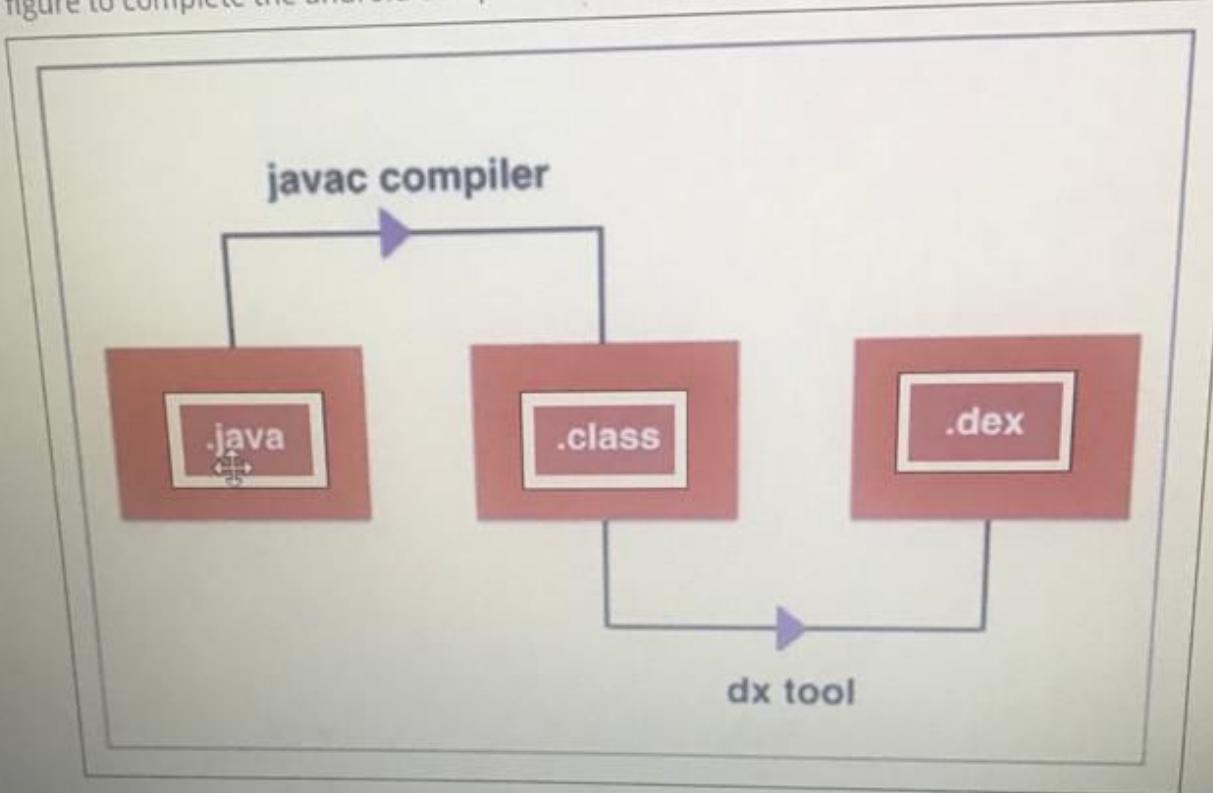
Question 12

Not yet answered

Marked out of
1.00

Flag question

Drag the correct figure to complete the android compilation steps?





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Question 14

Not yet answered

Marked out of
1.00

View question

Drag the matching keyword from the list below:

A. Content-provider / manages access to a structured set of data / It encapsulates the data and provide mechanisms for defining / standard interface / . Content Provider / is the / code running / that connects data in one process with / data security / in another process

Next page

≡ Quiz naviga

MCQ QUESTIONS

1	2	3
8	9	10
15	16	17
22	23	24
29	30	31
36	37	38
43	44	45
50	51	52

**Question 29**

Not yet answered

Marked out of
1.00 Flag question

Which of the following is **not** a technology used in 4G LTE physical layer to enhance the data rate?

Select one:

- a. Orthogonal frequency-division multiple Access(OFDMA)
- b. Non-orthogonal multiple access (NOMA)
- c. Orthogonal frequency-division multiplexing (OFDM)
- d. Multiple Input Multiple Output (MIMO)
- e. Search Results

Web results

Single-carrier FDMA



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Question 41

Not yet answered

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▼ Flag question

GSM may outlive 3G as a mobile communication technology.

Select one:

- True
- False

Flag question

```
Public static void printHelloWorld() {  
    System.out.println("Hello World");  
}
```

The Smali code would be:

```
.method public static printHelloWorld() v  
.registers 2  
  
sget-object v0, Ljava/lang/System;->out:Ljava/io/PrintStream ;  
const-string v1, "Hello World"  
invoke-virtual {v0,v1}, Ljava/io/PrintStream;->println(Ljava/lang/String;)  
return-void
```

end method

Fill in the sections which are missing.

printHelloWorld()

end method

Hello World

return-void

java/io/PrintStream



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Question 50

Not yet answered

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Flag question

Select all the correct example scenarios of unintended data leakage flows that may exist, (OWASP M4)

Select one or more:

- a. Logging
- b. Leaking content providers
- c. Browser cookie objects
- d. URL caching
- e. Analytics data sent to third parties
- f. Copy/paste buffer caching

Flag question

```
Public static void printHelloWorld() {  
    System.out.println("Hello World");  
}
```

The Smali code would be:

```
.method public static printHelloWorld() v  
.registers 2  
  
sget-object v0, Ljava/lang/System;->out:Ljava/io/PrintStream ;  
const-string v1, "Hello World"  
invoke-virtual {v0,v1}, Ljava/io/PrintStream;->println(Ljava/lang/String;)  
return-void
```

end method

Fill in the sections which are missing.

printHelloWorld()

end method

Hello World

return-void

java/io/PrintStream

Moodle

Online Exams

Sri Lanka Institute of Information Technology

True or false?:

Users don't need apps that guard their Android devices against malware.

Select one:

True

False

Next

Q W E R T Y U I
A S D F G H J K



Moodle

Question 15
Not yet answered
Marked out of 1.00
Flag question:

How to be safe from Android malwares?

Select one or more:

a.
Be cautious when apps are requesting more permissions than what they really need. For example, a notes app asking for READ_SMS permission is something suspicious.

b.
Make sure that you update your devices as soon as there is an update released

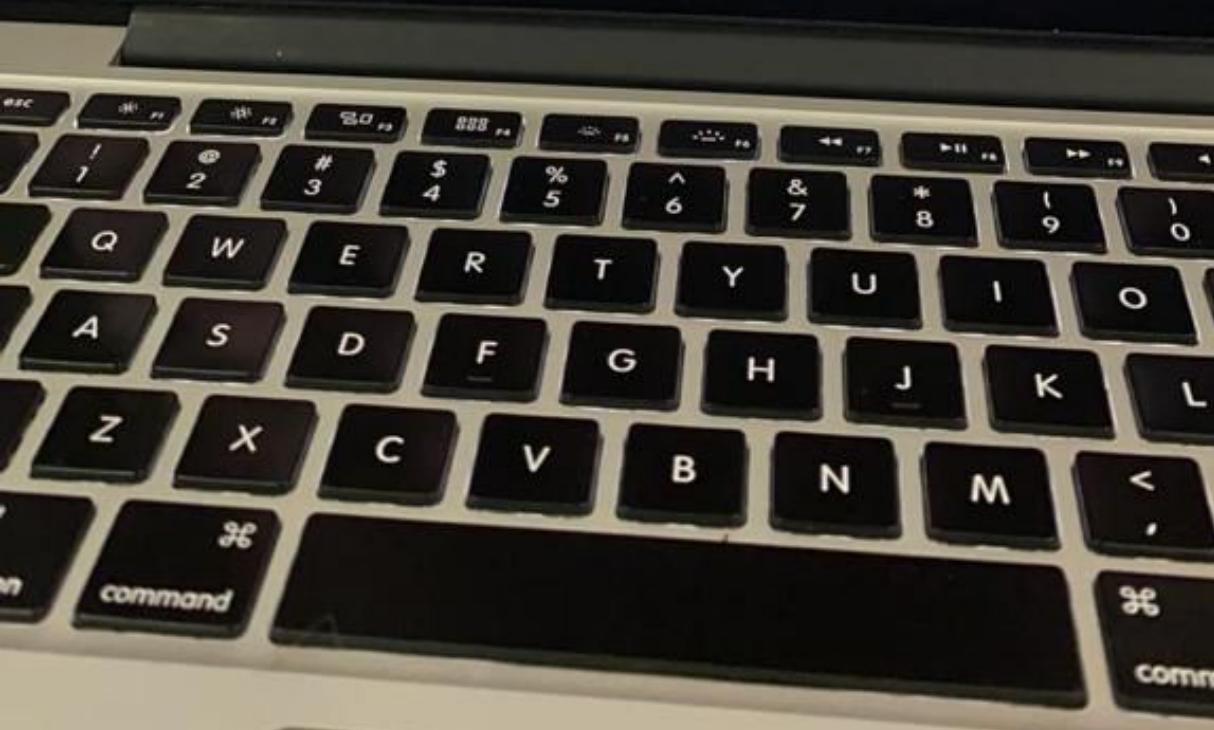
c.
Use an anti-malware application.

d.
Do not blindly accept permissions requested by the Apps.

e.
Always install apps from official market places (Play Store)

f.
Try not to place too much of sensitive information on the phone.

Next page



Moodle

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Question 9
Not yet answered
Marked out of 1.00
Flag question

Which of the following is not a potential consequence of breaking the A5 cipher?

Select one:

- a. Intercepting calls
- b. Cloning of Cell Phones
- c. Decoding calls
- d. Monitoring Data Transfers
- e. SIM Corruption

Next page

A W S D F G H J K L

Z X C V B N M

Command



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Question 2

Not yet answered

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Flag question

Integrity protection not available for the user plane data inside the 4G LTE network.

Select one:

- True
- False



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Question 10

Not yet answered

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Flag question

Which of the following technique is used to achieve core network security in 4G architecture?

Select one:

- a. End to End Encryption
- b. NAS Key
- c. IPSec
- d. Cipher Key & Integrity Key
- e. VPN



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rag question

Which of the following are added as a new feature to the Evolved Node B (eNB) in 4G LTE Networks compared to nodeB in 3G UMTS Networks? (Select Two)

Select one or more:

- a. Ciphering/deciphering of user and control plane data
- b. Act as the air interface to connect mobile phones to the mobile network
- c. Negotiate User Level Quality of Service
- d. Modulation and Demodulation of radio signals
- e. Radio connection with the User Equipment

≡ Quiz na

Finish attemp

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1	2
9	10
17	18
25	26

FEEDBACK C

31



Next page

Which of the following is not true about "Bring Your Own Device" concept.

Select one:

- a. BYOD provides fast access to corporate data
- b. It's impossible to implement security policies to control BYOD
- c. A company should define minimum required security controls for BYOD devices
- d. BYOD poses a security challenge to corporate network

**Question 2**

Not yet answered

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Flag question

Match the correct term in 3G Key Generation process.

Generated by the UE and forwarded to the VLR for comparison

RES



Used by the UE to verify the integrity of the received authentication data

Choose...



Generated by HLR to create a unique MAC

Choose...



Generated by the HLR and forwarded to the VLR for comparison

Choose...



**Question 2**

Not yet answered

Marked out of
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Flag question

Match the correct term in 3G Key Generation process.

Generated by the UE and forwarded to the VLR for comparison

RES

Used by the UE to verify the integrity of the received authentication data

AUTN

Generated by HLR to create a unique MAC

Sequence Number

Generated by the HLR and forwarded to the VLR for comparison

XRES





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Question 4

Not yet answered

Marked out of
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Flag question

Which of the following is not an advantage of 'New Key hierarchy in 4G LTE' networks?

Select one:

- a. Fast Key Changes
- b. Authentication & Key Agreement (AKA) process takes less time and resources
- c. Fast handovers
- d. The damage of an attack is lessened due to localization
- e. Extra complexity added to security



Drag & drop the correct term into the paragraph.

When a subscriber uses the Mobile Station , to make a call in the network, it transmits the call request to the Base Transceiver Station(BTS) . This location contains all the radio equipment (i.e., antennas, signal processing devices, and amplifiers) necessary for radio transmission within a geographical area called a Cell . The Base Station Controller (BSC) is responsible for handling the hand-off between towers.

Subnet

[Next page](#)

Match the correct description to the Mobile Operating System

The operating system provides multitasking and supports specialized input devices that have been adopted by RIM for use in its handhelds, particularly the trackwheel, trackball, trackpad and touchscreen.

Apple's mobile operating system, originally developed for the iPhone, it has since been extended to support other Apple devices.

A discontinued family of mobile operating systems developed by Microsoft for smartphones and Pocket PCs.

A discontinued mobile operating system and computing platform designed for smartphones commonly used in the past by Nokia & Sony Ericsson.

Developed by a small startup company that was purchased by Google Inc., Is a Linux-derived OS backed by Google.

BlackBerry

iOS

Windows Phone

Symbian

Android

Next page

31

Which of the following are reasons to use RAKE antennas in 3G? (Select Two)

Select one or more:

- a. Due to buildings, hills and objects signal pulses are spread over time.
- b. Received pulse can be eavesdropped by a man in the middle
- c. Received pulse is already amplified at the reception of RAKE
- d. Received pulse is distorted (always) because of the frequency and delay response of the channel.
- e. Received pulse can be overlapped with adjacent cells

Next >



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Question 7

Not yet answered

Marked out of
1.00

Flag question

Which of the following is not correct regarding the eSIM?

Select one:

- a. Due to its nature it is impossible to provide network authentication
- b. Can be programmed with a SIM profile over the internet and eliminates the need to insert a SIM card in to the Phone
- c. It is a programmable chip built  to the device itself
- d. Provides network connectivity without the need for a physical SIM card

Next page



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Question **22**

Not yet answered

Marked out of
1.00

Flag question

Which of the following is a 'logical' connection in 3G architecture?

Select one:

- a. Connection between the MSC and GMSC
- b. Connection between the neighboring RNCs
- c. Connection between the RNC and MSC
- d. Connection between the MSC and EIR
- e. Connection between the NodeB and RNC



Question 6

Not yet answered

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1.00

Flag question

Which of the following is Not true?

Select one:

- a. Both 3G and 4G authentication use challenge and response mechanism
- b. Both 3G and 4G authentication use an authentication token for verification
- c. Both 3G and 4G authentication use RAND value generated by Home Network
- d. Both 3G and 4G authentication use a master key for key generation
- e. Both 3G and 4G authentication use an extended key hierarchy



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Question 19

Not yet answered

Marked out of
1.00

Flag question

GSM Networks does not provide any data integrity whereas 3G UMTS has an inbuilt data integrity solution.

Select one:

- True
- False



Question 28

Not yet answered

Marked out of
1.00 Flag question

Mobile subscribers do not have access to the International Mobile Subscriber Identity (IMSI) number.

Select one:

- True
- False

[Next page](#)

Which of the following components are not part of management databases that support roaming in the GSM network?

Select one or more:

- a. EIR
- b. BSC
- c. HLR
- d. VLR
- e. AuC



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Question 20

Not yet answered

Marked out of
1.00

Flag question

GSM may outlive 3G as a mobile communication technology.

Select one:

- True
- False



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Question 17

Not yet answered

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1.00

Flag question

Which of the following is not true about A5 encryption versions.

Select one:

- a. A5/0 allows GSM to operate without encrypting call traffic
- b. A5/2 is used mainly outside of Europe and US
- c. A5/4 is the encryption standard used in 4G LTE
- d. A5/3 is a stronger version of A5, for use in 3G networks
- e. A5/1 is the original A5 algorithm



Question 15

Not yet answered

Marked out of
1.00[Flag question](#)

Which of the following components are not part of management databases that support roaming in the GSM network?

Select one or more:

- a. AuC
- b. EIR
- c. VLR
- d. BSC
- e. HLR

[Next page](#)

Which of the following is **not** a technology used in 4G LTE physical layer to enhance the data rate?

Select one:

- a. Non-orthogonal multiple access (NOMA)
- b. Multiple Input Multiple Output (MIMO)
- c. Single-carrier FDMA
- d. Orthogonal frequency-division multiple Access(OFDMA)
- e. Orthogonal frequency-division multiplexing (OFDM)



Question 14

Not yet answered

Marked out of
1.00

Flag question

Which of the following is **not** a field generated by the HLR during the 3G UMTS Authentication Process?

Select one:

- a. Cipher Key
- b. USIM Key
- c. MAC
- d. Integrity Key
- e. XRES

Next pag



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Question 24

Not yet answered

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1.00

Flag question

PSTN stands for:

Select one:

- a. Primary Service Telephone Network
- b. Public Switched Telephone Network
- c. Primary Service Telephone Nodes
- d. Public Systems Telephone Nodes
- e. Private Switched Telephone Network

**Question 25**

Not yet answered

Marked out of
1.00[Flag question](#)

Which of the following is not correct regarding the eSIM?

Select one:

- a. Can be programmed with a SIM profile over the internet and eliminates the need to insert a SIM card in to the Phone
- b. Provides network connectivity without the need for a physical SIM card
- c. It is a programmable chip built in to the device itself
- d. Due to its nature it is impossible to provide network authentication

[Next page](#)

Moodle

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Question 26

Not yet answered

Marked out of 1.00

Flag question

Integrity protection not available for the user plane data inside the 4G LTE network.

Select one:

True

False



Online Exams

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tion 5

es answered

ed out of

ng question

Match the correct description to the Mobile Operating System

Apple's mobile operating system, originally developed for the iPhone, it has since been extended to support other Apple devices.

iOS

A discontinued mobile operating system and computing platform designed for smartphones commonly used in the past by Nokia & Sony Ericsson.

Symbian

Developed by a small startup company that was purchased by Google Inc., is a Linux-derived OS backed by Google.

Android

A discontinued family of mobile operating systems developed by Microsoft for smartphones and Pocket PCs.

Windows Phone

The operating system provides multitasking and supports specialized input devices that have been adopted by RIM for use in its handhelds, particularly the trackwheel, trackball, trackpad and touchscreen.

BlackBerry

Next page

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Match the correct android resource to the given text.

This folder consists of raw resources that are required by the application. Examples would be images such as app icons.

This folder contains the application certificate along with the SHA1 digests of all the files used in the application.

This file holds most of the configuration details about the app. It also includes the package name, details about the app components that are used in the app, security settings for each app component, permissions that are requested by the application, and so on.

This file contains the Dalvik Bytecode generated from the source code written by developers. This file is what is executed on the device when the app runs. This file can be manually generated and executed on an Android device.

This folder allows a developer to place the files of his interest such as music, video, preinstalled databases, and so on. These files will be bundled with the app.

This file holds the compiled resources.

Res

META-INF

AndroidManifest.xml

classes.dex

Assets

resources.arsc

Next page



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What are the specific functions used in Android Activity lifecycle?

Select one or more:

a.

onResume()

b.

onFreeze()

c.

onCreate()

d.

onPause()

e.

onStart()



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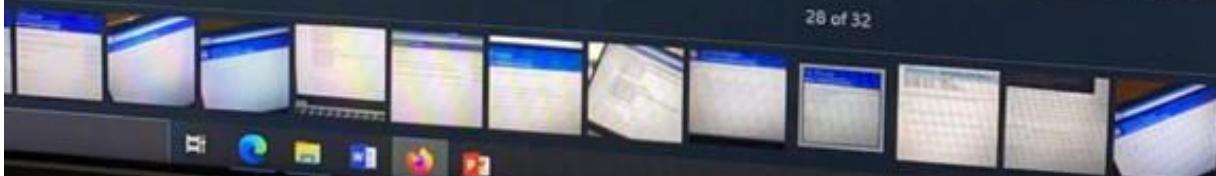
Content Provider will maintain android app's security. For this purpose following statement is missing. Write it down in the provided space.

<provider android:name="Provider Name"

<missing section>

Answer: `android:exported="true" />`

28 of 32



msi

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Question 52

Not yet answered

Marked out of
1.00

 Flag question

Unlike GSM, in 3G Networks IMSI is protected and is never transferred in clear text.

Select one:

- True
- False



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Question 48

Not yet answered

Marked out of
1.00

Flag question

Which of the following is not true about "Bring Your Own Device" concept.

Select one:

- a. BYOD provides fast access to corporate data
- b. A company should define minimum required security controls for BYOD devices
- c. BYOD poses a security challenge to corporate network
- d. It's impossible to implement security policies to control BYOD

Online Exams

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Match the description to correct term.

A mobile subscriber's current point of attachment.

Mobility Management ▾

System level management of co-channel interference, radio frequencies, and other radio transmission characteristics in wireless communication systems.

Base Transceiver Station ▾

Enables the serving networks to locate a mobile subscriber's point of attachment and maintain a mobile subscriber's connection as it continues to change its point of attachment.

Mobility Management ▾

Next page



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Question 21

Not yet answered

Marked out of
1.00

Flag question

What does the acronym ISDN stand for?

Select one:

- a. International Standard for Digital Networks
- b. International Service Digital Networks
- c. Integrated Services Digital Network
- d. Integrated Switched Digital Network
- e. Integrated Switched Data Network

GSM Networks does not provide any data integrity whereas

Select one:



True



False



Online Exams

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n 17

answered

1 out of

question

Which of the following is a disadvantage of 4G LTE Networks?

Select one:

- a. High Latency due to High Frequency Range
- b. Limited Bandwidth due to High Frequency Range
- c. Limited Coverage due to High Frequency Range
- d. Limited Mobility due to High Frequency Range
- e. Low Latency due to High Frequency Range



Moodle

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Question 14

Not yet answered

Marked out of 1.00

Flag question

GSM Networks does not provide any data integrity whereas 3G UMTS has an inbuilt data integrity solution.

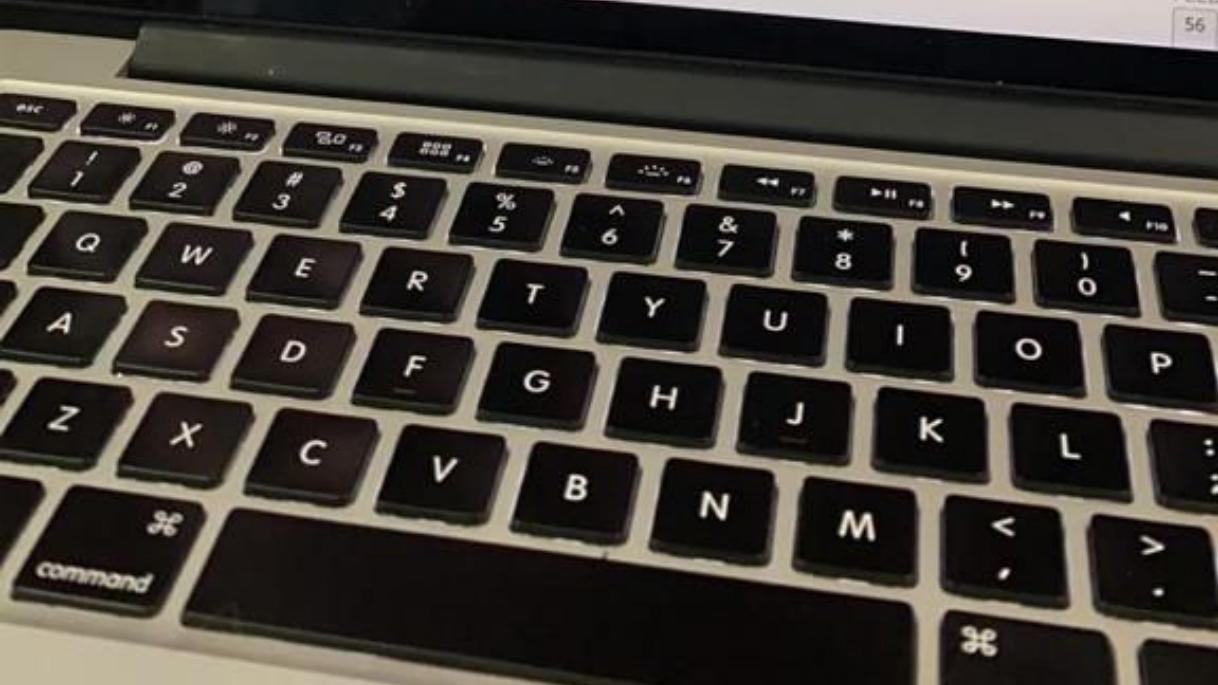
Select one:

True

False

Next page

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8
15
22
29
36
43
50
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56





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on 8

answered

out of

question

Match the description to correct term.

A mobile subscriber's current point of attachment.

System level management of co-channel interference, radio frequencies, and other radio transmission characteristics in wireless communication systems.

Enables the serving networks to locate a mobile subscriber's point of attachment and maintain a mobile subscriber's connection as it continues to change its point of attachment.

Mobility Management

Resource Management

Base Transceiver Station

