

Quiz or closed questions

General

What is a stream cipher?

Which of the following defines a cipher text attack?

what is known plaintext attack

Classification of wireless network, adhoc/infrastructure, fixed/mobile, wwan/wlan

What is Asymmetric encryption

Wireless Communication

In digital Communication system which type of waveforms are propagated in the channel?

Order the elements in the transmission chain (encoder, modulator, channel etc.)

Why the definition of the bandwidth 3db

PSK modulation - about the energy level of symbols and saturation level of a power amplifier

GNSS

How can a spoofing attack be detected?

Why monitoring GNSS spectrum is insufficient for spoofing detection?

GNSS - Why is line of sight to satellites important to have correct pseudorange calculations?

Are the clocks of Satellite and receiver synchronized?

What is broadcasted by the satellite

Do Out-Of-Band interferences affect GNSS?

Which of the following is a common indicator of a GNSS spoofing attack? - ☐ A gradual decrease in signal strength over time - ☐ Enhanced accuracy and reliability of GNSS signals - ☐ Sudden and significant deviations in position, velocity or time calculations - ☐ None of the others - ☐ Discrepancies between GNSS-based positions and those from alternative navigation systems (e.g., inertial navigation systems)

GNSS difference between range and pseudorange

WLAN / wifi

Two devices connected in Wi-Fi without RTS/CTS assumed to collide, order what happened (and there where a series of steps like A sends, B, sends, DATA(A) collide with DATA(B) etc,)

Sort the exchanged messages to connect to an AP

Algorithm used in OWE

How WEP key management is compared to WPA/WPA2

why not csma/ cd in wifi

authentication service - in the context of wireless networks

CDMA networks - why is power control important?

Purpose of DIFS in wifi networks

802.11 network - using ISM BW range, how many independent channels can be used?

Which wifi protocols are considered secure? (wpa with tkip, wpa2, wep, wpa3)

Definition of authenticator supplicant port server authentication

Maximum goodput that can be reached with this technology from 1 to 9

1. 802.11n, RTS/CTS enabled, UDP+IP
2. 802.11n, RTS/CTS disabled, UDP+IP
3. 802.11g, RTS/CTS enabled, UDP+IP
4. 802.11g, RTS/CTS disabled, UDP+IP
5. 802.11n, RTS/CTS enabled, TCP+IP
6. 802.11g, RTS/CTS disabled, TCP+IP
7. 802.11g, RTS/CTS enabled, TCP+IP
8. 802.11n, RTS/CTS disabled, TCP+IP
9. Fast ethernet 100 Mbps

WLAN attacks - [] WEP - [] NAV - [] ROGUE AP - [] DEAUTH - [] CHOP-CHOP

WPAN / Bluetooth

How does Bluetooth Classic handle privacy concerns compared to Bluetooth LE? - [] Bluetooth Classic uses encryption keys for all data transmissions. - [] Bluetooth Classic limits the number of devices that can connect simultaneously. - [] Bluetooth Classic randomizes MAC addresses for improved privacy. - [] Bluetooth Classic does not have any privacy features. - [] None of the other options.

What is bluesnarfing?

BT secure services

How prevent MITM on Bluetooth Secure Simple Pairing?

Which multiple access mechanism BT uses?

Bluetooth Privacy Feature

WWAN / mobile

What is Stingray vulnerability?

Which of the following are 2G vulnerabilities?

Ss7 vulnerability

Purpose of paging and location are in mobile network

Differences between VLR and HLR

Describe device authentication in GSM (completare l'immagine con le parti date.)

4G networks - techniques used to enhance security

GSM Authentication

Wifi rate adaptation

Handover (mobile)
