Question 1   Correct   Mark 1.00 out of 1.00

Adi and Bagas hang out together at a cafe. Both Adi and Bagas wants to access the internet through WiFi network. While Adi wants to use WiFi network provided by the cafe, Bagas wants to set up his own WiFi hotspot (e.g. with 4G WiFi modem). Accidentally, the hotspot configured by Bagas operates over the same channel as the cafe's WiFi access point. In such a case, both Adi's and Bagas' devices cannot associate and communicate to their desired access point. (Assuming they're not transmitting at the same time)

Select one:

- ○ True
- ● False ✓

Both of them can still associate to different access points although the access points operate in the same channel/frequency. They can also communicate with their respective access point, as long as they are not transmitting at the same time (concurrent transmission in the same channel leads to collision).

The correct answer is 'False'.

Question 2   Correct   Mark 1.00 out of 1.00

A worker is wants to connect his PC to some peripherals, e.g. headset, keyboard and mouse, wirelessly by using Bluetooth. Which type of wireless network taxonomy is most suitable with this description?

Select one:

○ a. infrastructure multi hops

○ b. infrastructure single hop

○ c. ad-hoc multi hops

◉ d. ad-hoc single hop ✓

The correct answer is: ad-hoc single hop

Question 3   Correct   Mark 1.00 out of 1.00

Call setup dilakukan dengan RTP (Real Time Protocol) sebelum SIP (Session Intialization Protocol) berjalan

Select one:

○ True

◉ False ✓

The correct answer is 'False'.

Question 4

Correct   Mark 1.00 out of 1.00

Which type of wireless network is based on the 802.11 standard and a 2.4-GHz or 5-GHz radio frequency?

Select one:

○ a. wireless metropolitan-area network

○ b. wireless wide-area network

○ c. wireless personal-area network

◉ d. wireless local-area network ✓

The correct answer is: wireless local-area network

Question 5

Correct   Mark 1.00 out of 1.00

Multipath propagation pada kanal wireless diakibatkan oleh gelombang electromagnetic yang dipantulkan oleh beberapa benda atau permukaan antara transmitter dan receiver, sehingga ada beberapa versi sinyal (dalam hal waktu tiba dan signal power) yang tiba di receiver.

Select one:

◉ True ✓

○ False

The correct answer is 'True'.

Question 6

Suatu cara untuk memulai eksekusi file tanpa harus melakukan download keseluruhan file tersebut merupakan definisi dari.

Select one:

- ○ a. Streaming ✓
- ○ b. Conversation
- ○ c. Downloading
- ○ d. Storing
- ○ e. Sending
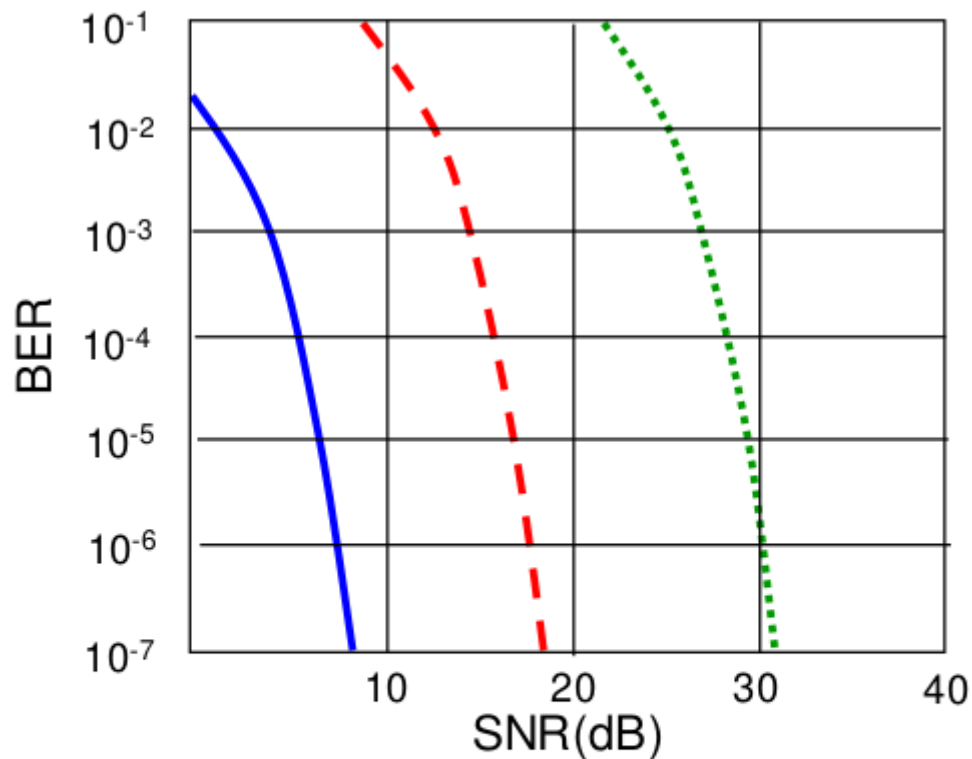
Your answer is correct.

The correct answer is: Streaming

Which statement is correct with regards to the SNR vs BER graphs above?

Select one:

- a. QAM256 gives the best throughput in all situations ✗

- b. If SNR is getting lower, the modulation should be chosen such that the minimum BER is maintained

- c. If BER is getting lower, the modulation should be chosen such that the minimum SNR is maintained

- d. Higher SNR leads to higher BER

The correct answer is: If SNR is getting lower, the modulation should be chosen such that the minimum BER is maintained

Question 8

Incorrect   Mark 0.00 out of 1.00

A WiFi terminal (with *Collision Avoidance* mechanism) would sense the medium first before transmitting a frame. If the medium is idle continuously for a certain period, only then it transmits the packet.

Select one:

- ⦿ True ✘
- ○ False

WiFi with collision avoidance will first make sure that there is no hidden terminal by using RTS-CTS mechanism

The correct answer is 'False'.

Question 9

Correct   Mark 1.00 out of 1.00

A worker is wants to connect his PC to some peripherals, e.g. headset, keyboard and mouse, wirelessly by using Bluetooth. Which type of wireless network taxonomy is most suitable with this description?

Select one:

- ○ a. infrastructure single hop
- ○ b. infrastructure multi hops
- ⦿ c. ad-hoc single hop ✔
- ○ d. ad-hoc multi hops

The correct answer is: ad-hoc single hop

Question 10

Incorrect   Mark 0.00 out of 1.00

Adi dan Bagas hang out bersama di sebuah cafe. Keduanya ingin mengakses internet melalui jaringan WiFi. Adi menggunakan jaringan WiFi yang disediakan cafe, sedangkan Bagas menggunakan WiFi hotspot nya sendiri (dengan modem 4G WiFi). Kebetulan, hotspot yang dikonfigurasi Bagas menggunakan channel yang sama dengan WiFi access point di cafe. Maka, gawai Adi dan Bagas tidak dapat terasosiasi dan berkomunikasi dengan access point tujuan mereka. (asumsi mereka tidak transmit bersamaan)

Select one:

◉   True ❌

◯   False

Both of them can still associate to different access points although the access points operate in the same channel/frequency. They can also communicate with their respective access point, as long as they are not transmitting at the same time (concurrent transmission in the same channel leads to collision).

The correct answer is 'False'.

Question 11

Incorrect   Mark 0.00 out of 1.00

Salah satu cara untuk mencocokkan waktu pada saat melakukan streaming video adalah dengan melakukan inisialisasi protokol SIP Session Intialization Protocol

Select one:

◉   True ❌

◯   False

The correct answer is 'False'.

Question 12

Correct   Mark 1.00 out of 1.00

Adi dan Bagas sedang nongkrong di sebuah cafe dan keduanya ingin mengakses internet menggunakan WiFi. Adi ingin menggunakan WiFi yang disediakan oleh cafe, sedengkan Bagas ingin menggunakan WiFi hotspot nya sendiri (e.g. modem 4G WiFi). Kebetulan, hotspot yang disetup Bagas menggunakan channel yang sama dengan access point WiFi milik cafe. Pada kasus ini, akan ada collision jika gawai Adi dan Bagas mengirimkan data ke access point masing2 pada saat bersamaan.

Select one:

○ True ✔

○ False

The correct answer is 'True'.

Question 13

Incorrect   Mark 0.00 out of 1.00

Setiap client yang tergabung dalam RTCP Real-Time Control Protocol melakukan control dengan RTP

Select one:

○ True ✘

○ False

The correct answer is 'False'.

Question 14

Correct   Mark 1.00 out of 1.00

Seorang teknisi melakukan konfigurasi WiFi router agar menggunakan channel 1, 6. atau 11. Apa tujuan mengatur channel tersebut?

Select one:

○ a. agar SSID tidak bisa di broadcast.

○ b. agar compatible dengan berbagai standar 802.11 yang berbeda.

⦿ c. untuk mencegah interferensi dengan perangkat wireless yang ada di sekitar. ✓

○ d. untuk mode security yang lebih kuat.

The correct answer is: untuk mencegah interferensi dengan perangkat wireless yang ada di sekitar.

Question 15

Correct   Mark 1.00 out of 1.00

Standard WiFi berikut memiliki data rate maximum di atas 1 Gbps:

Select one:

○ a. 802.11a

○ b. 802.11g

○ c. 802.11n

⦿ d. 802.11ac ✓

Your answer is correct.

The correct answer is: 802.11ac

Question 16

Correct   Mark 1.00 out of 1.00

Interference pada wireless berasal dari transmisi dari wireless node lain yang menggunakan frequency band yang sama dan berada di jangkauan range transmisinya.

Select one:

- ◉ True ✓
- ○ False

The correct answer is 'True'.

Question 17

Incorrect   Mark 0.00 out of 1.00

A company employs IoT solution for monitoring its manufacturing process. The IoT device communicates to the cellular network's base station through 4G connection. This is an example of wireless multi-hop infrastructure mode.

Select one:

- ◉ True ✗
- ○ False

It is an infrastructure mode but there is only one hop: IoT device directly to base station

The correct answer is 'False'.

Question 18

Correct   Mark 1.00 out of 1.00

Which type of wireless network uses low powered transmitters for a short-range network, usually up to 10 meters?

Select one:

- ○ a. wireless local-area network
- ○ b. wireless wide-area network
- ◉ c. wireless personal-area network ✓
- ○ d. wireless metropolitan-area network

The correct answer is: wireless personal-area network

Question 19

Correct   Mark 1.00 out of 1.00

Multipath propagation in wireless channel occurs because the electromagnetic wave is reflected by various objects/surfaces between transmitter and receiver, resulting in various signal version in terms of received time and signal power arriving at the receiver.

Select one:

- ◉ True ✓
- ○ False

The correct answer is 'True'.

Question 20

Incorrect   Mark 0.00 out of 1.00

Packet marking perlu dilakukan terlebih dahulu pada mekanisme packet scheduling dalam mendukung support jaringan multimedia.

Select one:

◉ True ❌

◯ False

The correct answer is 'False'.

Question 21

Incorrect   Mark 0.00 out of 1.00

A WiFi terminal with CSMA/CA multiple access protocol immediately aborts the transmission when it detects that there is packet collision.

Select one:

◉ True ❌

◯ False

Ability to detect collision and abort transmission when a collision is detected belongs to CSMA/CD

The correct answer is 'False'.