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1) What is required for electrons to flow?

a) a closed loop of conductors

b) an open loop of insulators

c) a closed loop of insulators

d) an open loop of conductors

***answer:*** ***a) a closed loop of conductors***  
Karna sebuah listrik hanya akan mengalir jika elektron yang ada menggunakan Close Loop Konduktor.

2) Which of the following describes attenuation?

a) a loss of signal strength

b) an increase in signal amplitude

c) the delay experienced during signal travel

d) the time it takes a signal to reach its destination

***answer: a) a loss of signal strength***Karenna kekuatan sinyal berkurang atau melemah bila jaraknya terlalu jauh melalui media transmisi, baik dengan menggunakan media transmisi guide seperti kabel, atau media transmisi unguide seperti gelombang Wifi.

3) Which of the following is a cause of crosstalk?

a) poorly terminated network cabling

b) the loss of a signal’s ground reference

c) AC line nouse coming from a nearby video monitor or hard disk drive

d) FM Radio signals, TV signals, various types of office equipment

***answer: a) poorly terminated network cabling***

Karena saluran yang saling berdekatan dan menyebabkan gelombang elektromagnetik yang saling berhubungan dan tercampur. Akibatnnya sebuah kabel jaringan yang tak berfungsi

4) Which material is considered an electrical semiconductor?

a) air

b) silicon

c) glass

d) gold

***answer: b) silicon***

karena konduktansinya dapat diubah-ubah dengan menyuntikkan materi lain. Bahan yang sering digunakan Semikonduktor adalah Silikon dll.

5) Which of the following describes Manchester encoding?

a) Bits are represented by transitions in voltage

b) Bits are represented by +5V (or +3.3V) and 0V values

c) Bits are represented by modulations in the frequency of a carrier wave

d) Bits are represented by modulations in the amplitude of a carrier wave

***answer: a) Bits are represented by transitions in voltage***

Karena teknik pengkodean sinkronisasi jam yang digunakan oleh Physical Layer untuk mengkodekan jam dan data dari sinkronisasi arus bit Volt.

6) What must occur before layer 2 device can process a signal that has been transmitted on their LAN segment?

a) The frame must be encoded as bits

b) The signal must be decoded into a packet

c) The signal must be converted from voltages to bits

d) The signal must be converted from bits to voltages

***answer: c) The signal must be converted from voltages to bits***Karena Segmen tegangan rendah dari jaringan listrik diubah ke dalam bentuk LAN

7) Which of the following is a design goal when planning Ethernet networks?

a) increasing the number of collision domains

b) localizing and minimizing the number of collisions

c) enlarging and extending physical network segments

d) maximizing the number of hosts that have access to the shared medium

***answer: b) localizing and minimizing the number of collisions***

karena Semua piranti pada suatu jaringan 10Base2, 10Base5, dan 10Base-T yang menggunkaan HUB beresiko collisions antara frame yang mereka kirimkan, makanya semua piranti jaringan yang ada pada salah jenis jaringan Ethernet ini berada dalam satu collision domain. Karena itulah perlu mengurai jumlah collision

8) What does the ground plane provide in a computer circuit board?

a) heat sink

b) high resistance to ground

c) signal reference ground

d) spike dampening

***answer: c) signal reference ground***

Karna Model refensi Jaringan dan model-model lainnya yang berhubungan dengan protocol jaringan lainnya yang spesifik, adalah sangat efensial. Begitu pula halnya standar dan teknologi jaringan, yang harus dipahami dan dimengerti.