

**1. What are the key functions of encapsulation? (Choose three.)**

allows modification of the original data before transmission

**identifies pieces of data as part of the same communication**

enables consistent network paths for communication

**ensures that data pieces can be directed to the correct receiving end device**

**enables the reassembly of complete messages**

tracks delay between end devices

**2. Which two layers of the OSI model have the same functions as the TCP/IP model Network Access Layer? (Choose two.)**

Network

Transport

**Physical**

**Data Link**

Session

**3. According to the OSI model, FTP, TFTP, Telnet, and HTTP are used to check connectivity up to which layer?**

Network

Transport

Session

Presentation

**Application**

**4. What is true of data as it flows across the internetwork? (Choose three.)**

A single email transaction segmented into multiple packets will take the same path across a WAN from source to destination.

**Overhead is used to notify devices on a network that errors have been detected in data transmission.**

**Path selection is important for optimizing data flow and increasing performance.**

**Managing data flow and regulating traffic types is handled by intermediary devices.**

Application data is altered as network devices analyze and determine the best path to the destination.

End devices such as hubs and routers are used to originate the flow of data.

**5. Which devices connect individual hosts to the network and can connect multiple individual networks to form an internetwork? (Choose three.)**

communication server

**firewall**

network printer

PDA

router

VoIP phone

6. *What are the primary functions of the header and trailer information resulting from encapsulation? (Choose three.)*

prevent data from being captured or altered

**assist intermediary devices with processing and path selection**

**uniquely identifies source and destination devices**

ensure ordered arrival of data

assist intermediary devices with the modification of data

**manage error recovery and data integrity**

7. *What is true regarding information that travels from the source to the destination? (Choose two.)*

The addressing process is dependent upon the data content.

**Headers are added to uniquely identify hosts.**

**Protocols determine the type, structure and purpose of labels and addressing.**

The process of removing labels is called encapsulation.

Each layers addressing is dependent upon other layers of the OSI model.

8. *Which statements correctly identify the role of intermediary devices in the network? (Choose three.)*

**determine pathways for data**

initiate data communications

**retime and retransmit data signals**

originate the flow of data

**manage data flows**

final termination point for data flow

9. *Select the statements that represent processes network protocols describe. (Choose three.)*

the form or structure of the communication pieces

**the process by which networking devices share information about network paths**

how to implement or accomplish layer functions

**how and where error and system messages are passed between devices**

**establishment and termination of data transfer sessions**

the inner-workings of hardware used to communicate on the network

10. *Select the statements that are correct concerning network protocols. (Choose three.)*

**define the structure of layer specific PDU's**

dictate how to accomplish layer functions

**outline the functions necessary for communications between layers**

limit hardware compatibility

**require layer dependent encapsulations**

eliminate standardization among vendors

**11. What are the benefits of using a layered approach to assist with network troubleshooting? (Choose three.)**

Guarantee the delivery of sent and received Email.

**Prevent technology change at one layer from affecting technology at another layer of the model.**

**To make network communication easier to understand.**

In order to describe how the top layer of the model communicates directly with the top layer in the communication process.

**Allow competitors to design products at different layer of the model and have them work together.**

Insure that all copy right rules are followed by all vendors.