**Assignment 02 CCN Theory**



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Class Section: **A**

“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”



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Submitted to:

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Month Day, Year (11 04, 2025)

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**Question 1**

Which three acronyms/initializes represent standards organizations? (Choose three.)

1. **IANA**
2. TCP/IP
3. **IEEE**
4. **IETF**
5. OSI
6. MAC

**Question 2**

What type of communication will send a message to all devices on a local area network?

1. **Broadcast**
2. Multicast
3. Unicast
4. Allcast

**Question 3**

In computer communication, what is the purpose of message encoding?

1. **To convert information to the appropriate form for transmission**
2. To interpret information
3. To break large messages into smaller frames
4. To negotiate correct timing for successful communication

**Question 4**

Which message delivery option is used when all devices need to receive the same message simultaneously?

1. Duplex
2. Unicast
3. Multicast
4. **Broadcast**

**Question 5**

What are two benefits of using a layered network model? (Choose two.)

1. **It assists in protocol design.**
2. It speeds up packet delivery.
3. It prevents designers from creating their own model.
4. **It prevents technology in one layer from affecting other layers.**
5. It ensures a device at one layer can function at the next higher layer.

**Question 6**

What is the purpose of protocols in data communications?

1. Specifying the bandwidth of the channel or medium for each type of communication
2. Specifying the device operating systems that will support the communication
3. **Providing the rules required for a specific type of communication to occur**
4. Dictating the content of the message sent during communication

**Question 7**

1. Which logical address is used for delivery of data to a remote network?
2. Destination MAC address
3. **Destination IP address**
4. Destination port number
5. Source MAC address
6. Source IP address

**Question 8**

What is the general term that is used to describe a piece of data at any layer of a networking model?

1. Frame
2. Packet
3. **Protocol data unit**
4. Segment

**Question 9**

Which two protocols function at the internet layer? (Choose two.)

1. POP
2. BOOTP
3. **ICMP**
4. **IP**
5. PPP

**Question 10**

Which layer of the OSI model defines services to segment and reassemble data for individual communications between end devices?

1. Application
2. Presentation
3. Session
4. **Transport**
5. Network

**Question 11**

Which type of communication will send a message to a group of host destinations simultaneously?

1. Broadcast
2. **Multicast**
3. Unicast
4. Anycast

**Question 12**

What process is used to receive transmitted data and convert it into a readable message?

1. Access control
2. **Decoding**
3. Encapsulation
4. Flow control

**Question 13**

What is done to an IP packet before it is transmitted over the physical medium?

1. It is tagged with information guaranteeing reliable delivery.
2. It is segmented into smaller individual pieces.
3. It is encapsulated into a TCP segment.
4. **It is encapsulated in a Layer 2 frame.**

**Question 14**

What process is used to place one message inside another message for transfer from the source to the destination?

1. Access control
2. Decoding
3. **Encapsulation**
4. Flow control

**Question 15**

A web client is sending a request for a webpage to a web server. From the perspective of the client, what is the correct order of the protocol stack that is used to prepare the request for transmission?

1. HTTP, IP, TCP, Ethernet
2. **HTTP, TCP, IP, Ethernet**
3. Ethernet, TCP, IP, HTTP
4. Ethernet, IP, TCP, HTTP