**SE 303: Data Communication and Computer Networks**  
**Graded Assignment No 2**  
**Assignment Date:** 8th April, 2025  
**Strict Deadline:** 11th April, 2025 (12 Noon)  
**Instructions:** Hard copy submission. Copying/Cheating Not Allowed. Encircle the right Answer(s).

**Question 1**  
Which three acronyms/initialisms represent standards organizations? (Choose three.)

* IANA (encircled)
* TCP/IP
* IEEE (encircled)
* IETF (encircled)
* OSI
* MAC

**Question 2**  
What type of communication will send a message to all devices on a local area network?

* Broadcast (encircled)
* Multicast
* Unicast
* Allcast

**Question 3**  
In computer communication, what is the purpose of message encoding?

* To convert information to the appropriate form for transmission (encircled)
* To interpret information
* To break large messages into smaller frames
* 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?

* Duplex
* Unicast
* Multicast
* Broadcast (encircled)

**Question 5**  
What are two benefits of using a layered network model? (Choose two.)

* It assists in protocol design. (encircled)
* It speeds up packet delivery.
* It prevents designers from creating their own model.
* It prevents technology in one layer from affecting other layers. (encircled)
* 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?

* Specifying the bandwidth of the channel or medium for each type of communication
* Specifying the device operating systems that will support the communication
* Providing the rules required for a specific type of communication to occur (encircled)
* Dictating the content of the message sent during communication

**Question 7**  
Which logical address is used for delivery of data to a remote network?

* Destination MAC address
* Destination IP address (encircled)
* Destination port number
* Source MAC address
* 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?

* Frame
* Packet
* Protocol data unit (encircled)
* Segment

**Question 9**  
Which two protocols function at the internet layer? (Choose two.)

* POP
* BOOTP
* ICMP (encircled)
* IP (encircled)
* PPP

**Question 10**  
Which layer of the OSI model defines services to segment and reassemble data for individual communications between end devices?

* Application
* Presentation
* Session
* Transport (encircled)
* Network

**Question 11**  
Which type of communication will send a message to a group of host destinations simultaneously?

* Broadcast
* Multicast (encircled)
* Unicast
* Anycast

**Question 12**  
What process is used to receive transmitted data and convert it into a readable message?

* Access control
* Decoding (encircled)
* Encapsulation
* Flow control

**Question 13**  
What is done to an IP packet before it is transmitted over the physical medium?

* It is tagged with information guaranteeing reliable delivery.
* It is segmented into smaller individual pieces.
* It is encapsulated into a TCP segment.
* It is encapsulated in a Layer 2 frame. (encircled)

**Question 14**  
What process is used to place one message inside another message for transfer from the source to the destination?

* Access control
* Decoding
* Encapsulation (encircled)
* 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?

* HTTP, IP, TCP, Ethernet (encircled)
* HTTP, TCP, IP, Ethernet
* Ethernet, TCP, IP, HTTP
* Ethernet, IP, TCP, HTTP