*Multiple choice questions:*

1. Which of the following is a class C IP address?

a)10.10.14.118

b) 135.23.112.57

c)191.200.199.199

d)204.67.118.54

2. UDP packets are encapsulated in:

a) en Ethernet frame

b) a TCP segment

c)an IP diagram

d)none of the above

3. Which of the following functions does UDP perform?

a)process to process communication

b)improve the data transfer rate of large files (compared to TCP)

c)assure that the sent messages arrive in the order that have been sent

d)protect the data sent against any corruption while transferring it.

4.Which of the following is not an application layer protocol?

a)HTTP

b)IMAP

c)SMTP

d)TCP

5. A one-to-all communication between one source and all hosts on a network can be classified as:

a)unicast communication

b)broadcast communication

c)multicast communication

d) anycast communication

6. The data link layer takes packets from ………….. and encapsulated them into frames for transmission

a) network layer

b)physical layer

c) transport layer

d) application layer

7. FTP uses the following channels:

a) the delta channel

b) the control channel

c) the bearer channel

d) the data channel

8. Which IP address class can have 64 000 subnets with 64 000 hosts/subnet?

a)class A

b) class B

c) class C

d) class D

9. Which can be an Ethernet physical address?

a)07:01:02:01:2C:4B

b) 07:01:02:01:2C:4B:2C

c) 07:02:01:2C:4B

d)none of the above

10. The underlying transport layer protocol used by SMTP:

a)TCP

b)UDP

c)both TCP and UDP

d)none of the above

11. In HTTP Protocol, a client can directly connect to a server using:

a)Web

b)Domain

c)TELNET

d)HTTP

*TRUE/FALSE:*

* Internet API is a set of rules that the sending program must follow so that the Internet can deliver the data to the destination program. (T/F)
* UDP is used together with IP when small amounts of information are involved but it uses more system resources than TCP (T/F)
* When configuring email clients, an Internet address for an SMTP server must be entered.  (T/F)
* File Transfer Protocol (FTP) provides the transmission in encrypted form to provide security for sensitive data. (T/F)
* The Open System Interconnection (OSI) model defines a networking framework to implement protocols in layers, with control passed from one layer to the next.  (T/F)
* The Transport Layer manages the mapping between these logical addresses and physical addresses. In IP networking, this mapping is accomplished through the Address Resolution Protocol (ARP). (T/F)
* The maximum number of IP addresses that can be assigned to hosts on a local subnet that uses the 255.255.255.224 subnet mask is 40. (T/F)
* The subnetwork address of a host with an IP address of 172.16.66.0/21 is 172.16.64.0.(T/F)
* To test the IP stack on your local host, you would ping the IP address 127.0.0.0 (T/F)
* A switch does not keep a record of the MAC addresses of the devices connected to it.(T/F)

*Complete with the correct word/s:*

1. The UDP ………. identifies the destination port and a reply port.
2. TCP/IP allows a packet to be sent without waiting for the ……………….of the previous packet.
3. A 10/100Mbps hub must share its ………….. with each and every one of its ports.
4. A router is typically connected to at least two networks, commonly two ………….or………. or a LAN and its ISP’S network .
5. ………… is a Computer Network diagnostic tool for displaying the route (path) and measuring transit delays of packets across an  (IP) network.
6. A …………… defines the format and the order of messages exchanged between two or more communicating entities.
7. The TCP/IP………..is used to detect corruption of data over a TCP or IPv4 connection.
8. ………………..in a network may occur when the load on the network  is greater than the capacity of the network.
9. HTTP Protocol allows exchange of ……… and ……….
10. Address Resolution Protocol (ARP) is a protocol for mapping an …………..to a …………………….that is recognized in the local network.