



## Networking Essentials (2+1)\_ Nhóm 01FIE

[Nhà của tôi](#) / [Các khoá học của tôi](#) / [NEES330380E\\_22\\_2\\_01FIE](#) / [Chapter 4: TCP/IP - Part 3](#) / [Quiz #2](#)

**Bắt đầu vào lúc** Tuesday, 11 April 2023, 12:59 PM

**Trạng thái** Đã xong

**Kết thúc lúc** Tuesday, 11 April 2023, 1:34 PM

**Thời gian thực hiện** 34 phút 57 giây

### Câu hỏi 1

Hoàn thành

Đạt điểm 1,00

Using a network ID of 138.10.16.0/22, what is the broadcast address for this subnet?

Answer:

### Câu hỏi 2

Hoàn thành

Đạt điểm 1,00

A binary file of 5000 bytes is transmitted over a TCP/IP network. Assume the transmitting application uses standard IP header without option. How many IP datagrams are needed for the application to complete transferring the file.

Select one:

☐ 1518

☐ 1

☒ 4

☐ 3

**Câu hỏi 3**

Hoàn thành

Đạt điểm 3,50

Five rows of bytes from a tcpdump capture with -XX flag are shown:

```
0x0000: 5e6c 75f5 c7ef 12b1 65aa 3dfc 0800 4500 ^lu....e.=...E.  
0x0010: 003b c8b2 4000 3f11 6fa3 c0a8 4104 c0a8 ;...@.?.o...A...  
0x0020: 4107 eae9 0035 0027 0395 700c 0100 0001 A....5!.p....  
0x0030: 0000 0000 0000 0976 6e65 7870 7265 7373 .....vnexpress  
0x0040: 036e 6574 0000 1c00 01
```

Answer the following questions?

1. What is the source MAC

?

2. What is the value of type field (Ethernet frame)

?

3. Is there option field in the ip header?

4. What is Total length of this ip datagram (decimal)

5. What is source ip (dotted decimal)

**Câu hỏi 4**

Hoàn thành

Đạt điểm 1,00

The physical layer is concerned with the movement of \_\_\_\_\_ over the physical medium.

Select one:

☐ dialogs

☒ bits

☐ programs

☐ protocols

## Câu hỏi 5

Hoàn thành

Đạt điểm 1,00

Which of the following best describes how an Ethernet client accesses the physical medium when transporting data?

Select one:

- ☐ It listens to ensure that no signal is present on the wire and then begins to transmit
- ☐ It waits for a special frame on the wire. It reconfigures the frame with data and transmits it to its downstream neighbor
- ☐ It sends out a special packet attempting to gain control of the network. If the client receives its own packet back, it has successfully won the right to communicate
- ☒ It sends a signal notifying other stations of its intent to send data. If no collision occurs, then the station transmits

## Câu hỏi 6

Hoàn thành

Đạt điểm 1,00

To stop broadcast, network designer uses:

Select one or more:

- ☐ Switch
- ☒ Router
- ☐ Hub
- ☒ VLAN

## Câu hỏi 7

Hoàn thành

Đạt điểm 1,00

Ethernet uses .....as its access methodology

Select one:

- ☐ CSMA/CA
- ☐ Token passing
- ☒ CSMA/CD
- ☐ packet passing

## Câu hỏi 8

Hoàn thành

Đạt điểm 1,00

Suppose your network is connected to another network via a router. Which OSI model layer provides the information necessary to direct data between the two networks?

Select one:

- ☐ Data link layer
- ☐ Session layer
- ☐ Physical layer
- ☒ Network layer

## Câu hỏi 9

Hoàn thành

Đạt điểm 1,00

An IP datagram without option in option field flowing through a router, This implies the first byte of IP header will be (in Hex)?

Select one:

- ☐ 65
- ☐ 4F
- ☒ 45
- ☐ 420

## Câu hỏi 10

Hoàn thành

Đạt điểm 1,00

Which statement best describes VLSM?

Select one:

- ☐ The creation of different subnet masks for subnetting different areas of the network
- ☐ The creation of a single subnet mask for the entire network
- ☐ A routing technique that incorporates the network ID and mask with each route advertisement
- ☒ A subnetting technique that produces a different mask for each host on a network, useful in maximizing the entire address space

## Câu hỏi 11

Hoàn thành

Đạt điểm 1,00

In which two layers of the OSI model do NICs belong?

Select one:

- ☐ Transport and Network layers
- ☐ Presentation and Application layers
- ☐ Network and Data Link layers
- ☒ Physical and Data Link layers

## Câu hỏi 12

Hoàn thành

Đạt điểm 1,00

Choose the correct sequence of fields making up ethernet frame

Field 5: Frame Check Sequence

Field 3: Type/Length

Field 4: Data payload

Field 2: Source Address

Field 1: Destination Address

## Câu hỏi 13

Hoàn thành

Đạt điểm 1,00

What is the network address of IP 192.168.10.222/27?

Answer: 192.168.10.192

## Câu hỏi 14

Hoàn thành

Đạt điểm 1,00

The main purpose of VLANs

Select one:

- ☐ Make up more collision domain
- ☐ Simplify switch configuration
- ☒ Narrow down broadcast domain
- ☐ Make up more broadcast domain

## Câu hỏi 15

Hoàn thành

Đạt điểm 1,00

Which of the following IEEE specifications pertains to wireless networking?

Select one:

- ☐ 802.7
- ☐ 802.5
- ☐ 802.1
- ☒ 802.11

## Câu hỏi 16

Hoàn thành

Đạt điểm 1,00

A client of the bank did an internet banking transaction over the internet via web browser. What is the port number that his application uses?

Answer: 443 GPT or 80

## Câu hỏi 17

Hoàn thành

Đạt điểm 1,00

For movie download, regarding the reliability/unreliability, which type of service is needed?

Select one:

- ☐ connectionless
- ☐ PAT
- ☒ connection-oriented
- ☐ NAT

## Câu hỏi 18

Hoàn thành

Đạt điểm 1,00

Frame is the data unit of which layer?

Select one:

- ☐ Transport
- ☐ Physical
- ☐ Network
- ☒ Data link

## Câu hỏi 19

Hoàn thành

Đạt điểm 1,00

The IP is an unreliable, connectionless protocol. This means that:

Select one or more:

- ☒ It does not need a connection to perform its function
- ☒ It does not guarantee delivery of data
- ☒ There is no checksum in it's header
- ☒ It does not have a way to connect and must rely on other components

**Câu hỏi 20**

Hoàn thành

Đạt điểm 1,00

Suppose your computer's IP address is 155.61.9.188, and your network administrator has not subnetted the network to which you're connected. What is your computer's subnet mask?

Select one:

- ☐ 255.255.255.255
- ☐ 255.255.255.0
- ☒ 255.255.0.0
- ☐ 255.0.0.0

**Câu hỏi 21**

Hoàn thành

Đạt điểm 1,00

Which fields of the IP header change from router to router when no fragmentation is assumed?

Select one or more:

- ☐ destination IP
- ☐ Internet Header Len (IHL)
- ☒ Time-to-live (TTL)
- ☒ Fragment offset

**Câu hỏi 22**

Hoàn thành

Đạt điểm 1,00

172.16.0.0/16 is a B-Class network address. How many subnets can be allocated if a new 255.255.255.192 subnet mask is used?

Answer:

~~1024~~ $2^6=64$ **Câu hỏi 23**

Hoàn thành

Đạt điểm 1,00

What is the network address of a host with IP/subnet mask: 172.16.220.200/255.255.255.192

Answer:

172.17.220/225

172.16.220.192/26



## Câu hỏi 24

Hoàn thành

Đạt điểm 1,00

Which of the following devices expands network without extending collision domain?

Select one or more:

☒ Hub☐ Repeater☒ Bridge☒ Switch

## Câu hỏi 25

Hoàn thành

Đạt điểm 1,00

What are the benefits of implementing VLAN?

Select one or more:

☒ Simplify the implementation of network with multiple organizational unit☒ Creation of additional broadcast domains☒ Limit broadcast range☒ Enhance network security

## Câu hỏi 26

Hoàn thành

Đạt điểm 1,00

What is broadcast address of the network in which 172.16.220.200/255.255.255.192 is ip/subnet mask of a host?

Answer: 172.16.220.192

172.16.220.255

## Câu hỏi 27

Hoàn thành

Đạt điểm 1,00

Coding and decoding are functions of \_\_\_\_\_ layer

Select one:

- ☐ Data link
- ☐ Network
- ☒ Physical
- ☐ Presentation

## Câu hỏi 28

Hoàn thành

Đạt điểm 1,00

You have just installed a new NIC in your computer and see the following stamped on it: 000A5E1A8DA2. This unique identifier is an example of what kind of address?

Select one:

- ☐ IP address
- ☐ Network address
- ☐ Virtual address
- ☒ MAC address

## Câu hỏi 29

Hoàn thành

Đạt điểm 1,00

In which of the following situations would it be most desirable to use a connectionless Transport layer protocol?

Select one:

- ☐ When sending an e-mail message to a long list of recipients
- ☐ When connecting to a graphics-intensive Web site
- ☒ When viewing a movie clip on the Web
- ☐ When retrieving a spreadsheet from a busy file server

## Câu hỏi 30

Hoàn thành

Đạt điểm 1,00

Which technology does the IEEE 802.3 specification describe?

Select one:

- ☐ Logical Link Control
- ☒ Ethernet LANs
- ☐ Network security
- ☐ Token ring LANs

## Câu hỏi 31

Hoàn thành

Đạt điểm 1,00

Datagram is the data unit at \_\_\_\_\_ layer

Select one:

- ☒ Internet
- ☐ Network access
- ☒ Transport
- ☐ Application

## Câu hỏi 32

Hoàn thành

Đạt điểm 3,50

Bytes of the first part of an ip datagram are shown:

45 00 01bd 0000 4000 2506 e94a 6f41 fa02 c0a8 4104 0050 81ea 206b 0f3f ada8 f0e8

Answer following questions:

1. What is the protocol id of the upper layer
2. Is this datagram fragment?
3. What is the Time-to-live value of this datagram (decimal)
4. What is the source port (decimal)
5. What is the destination port (decimal)

**Câu hỏi 33**

Hoàn thành

Đạt điểm 1,00

Given the address of 160.10.64.0/20, what subnet mask creates an additional four subnets from this network ID?

Answer: 255.255.252.0

255.255.240.0

**Câu hỏi 34**

Hoàn thành

Đạt điểm 1,00

The \_\_\_\_\_ layer adds a header to the packet coming from the upper layer that includes the logical addresses of the sender and receiver

Select one:

- ☐ transport
- ☐ physical
- ☒ network
- ☐ datalink

**Câu hỏi 35**

Hoàn thành

Đạt điểm 1,00

Identify the correct IP categories of the following addresses?

126.10.6.7/10

A

176.15.10.6/16

B

203.12.176.55/24

C

225.198.34.10/8

D

## Câu hỏi 36

Hoàn thành

Đạt điểm 1,00

The following is a dump of a TCP header (in decimal)

05 32 00 17 00 00 00 01 00 00 00 00 50 02 07 FF 00 00 00 00

- a. What is the source port number?
- b. What is the destination port number?
- c. What is the sequence number?
- d. What is the acknowledgement number?

05 32: src port  
00 17: dst port  
00 00 00 01: Seq  
00 00 00 00: ack

Sequence Number

1

Acknowledgement Number

0

Source port number

1330

Destination port number

23

## Câu hỏi 37

Hoàn thành

Đạt điểm 1,00

A client access the web page of a trading company over the internet by name. What is the port number of the first packet transmitting out from the client's host?

Answer: 53 GPT

## Câu hỏi 38

Hoàn thành

Đạt điểm 1,00

The length of IP datagram can not exceed

Select one:

- ☐ the maximum size of data payload field in the lower layer protocol
- ☒ 65536 bytes
- ☐ 1500 bytes
- ☐ 1518 bytes

## Câu hỏi 39

Hoàn thành

Đạt điểm 1,00

An IP datagram has arrived with the following information in the header (in hexadecimal):

45 00 00 54 00 03 00 00 20 06 00 00 7C 4E 03 02 B4 0E 0F 02

- a. Are there any options?
- b. Is the packet fragmented?
- c. What is the size of the data?
- d. What is the size of Internet header?

fragmented ?	<input type="text" value="no"/>
size of data	<input type="text" value="64"/> <input type="text" value="34"/>
Size of header	<input type="text" value="20"/>
options:	<input type="text" value="no"/>

## Câu hỏi 40

Hoàn thành

Đạt điểm 1,00

A datagram is carrying 1024 bytes of data. If there is no option information, what is the value of the header length field (IHL)? What is the value of the total length field? (TL)

TL =	<input type="text" value="1044"/>
IHL =	<input type="text" value="5"/>

[◀ Submission for lab #5](#)[Chuyển tới...](#)[Submission for lab#6 ▶](#)