



Virtual University

About Us

CS610  
Solved Final Term Paper 6

[Waqar.siddhu@gmail.com](mailto:Waqar.siddhu@gmail.com)

Year  
2017

For More Plz Visit

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the Name of Allāh, the Most Gracious, the Most Merciful

### Paper Pattern

MCQS 40 each 1 mark  
Short 4 each 2 marks  
Short 4 each 3 marks  
long 4 each 5 marks

Question No : 1 of 52

Marks: 1 (Budgeted Time 1 Min)

ATM assigns each VC a \_\_\_\_\_ identifier that is divided two parts to produce a hierarchy.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ 21-bit

☐ 22-bit

☐ 23-bit

☐ 24-bit

Made by: Waqar Siddhu

Question No : 2 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is the scheme, which is designed to help in detecting transmission errors, sends one extra bit of information with each character.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Parity checking

☐ Checksums

☐ CRC

☐ LRC

Made by: Waqar Siddhu



Question No : 3 of 52

Marks: 1 (Budgeted Time 1 Min)

A network that uses a ----- usually consist of a single long cable to which computers attach.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Star Topology

☐ Ring Topology

☐ Bus Topology

☐ Tree Topology

Made by: Waqar Siddhu

Question No : 4 of 52

Marks: 1 (Budgeted Time 1 Min)

Formally named \_\_\_\_\_ informally known as the thin wire Ethernet or Thin net.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ 10 Base 2

☐ 10 Base 5

☐ 10 Base T

☐ 100 Base T

Made by: Waqar Siddhu

Question No : 5 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ identifies which application program on receiving computer should receive the data

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Logical address  
Source port  
Logical address

☐ Source port

☒ Destination Port

correct

☐ Physical Address

Made by: Waqar Siddhu

Question No : 6 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is ideal in a situation where the group is geographically dispersed (i-e., has a few members at each site, with sites separated by long distances).

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Flood-and -Prune
- ☐ Configuration-and -Tunneling
- ☐ Core-Based Discovery
- ☐ Forwarding

**Made by: Waqar Siddhu**

Question No : 7 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ message is encapsulated in an \_\_\_\_\_ datagram and sent across the Internet.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ IP, TCP
- ☐ TCP, IP
- ☐ TCP, UDP
- ☐ UDP, TCP

**Made by: Waqar Siddhu**

Question No : 8 of 52

Marks: 1 (Budgeted Time 1 Min)

"Frame type" field of the header consists of \_\_\_\_\_ bits.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ 8
- ☐ 10
- ☐ 16
- ☐ 32

**Made by: Waqar Siddhu**



Question No : 9 of 52

Marks: 1 (Budgeted Time 1 Min)

Header of cell takes \_\_\_\_\_ of network capacity.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ 5%

☐ 10%

☐ 12%

☐ 15%

**Made by: Waqar Siddhu**

Question No : 10 of 52

Marks: 1 (Budgeted Time 1 Min)

Due to advancement in IT world as the Internet grew, the original \_\_\_\_\_ scheme became a limitation.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Subnet addressing

☐ Classful addressing

☐ Address mask

☐ Classless addressing

**Made by: Waqar Siddhu**

Question No : 11 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is used for compressed audio and video where the data rate is related to level of compression.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Constant Bit Rate (CBR) service

☐ Variable Bit Rate (VBR) service

☐ Available Bit Rate (ABR) service

☐ Uniform Bit Rate (UBR) service

**Made by: Waqar Siddhu**

Question No : 12 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is used for ordinary data.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Available Bit Rate (ABR) service
- ☐ Uniform Bit Rate (UBR) service
- ☐ Constant Bit Rate (CBR) service
- ☐ Variable Bit Rate (VBR) service

**Made by: Waqar Siddhu**

Question No : 13 of 52

Marks: 1 (Budgeted Time 1 Min)

The special type of address in IPv6 used for single destination computer is known as\_\_\_\_\_.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Anycast
- ☐ Unicast
- ☐ Multicast
- ☐ Broadcast

**Made by: Waqar Siddhu**

Question No : 14 of 52

Marks: 1 (Budgeted Time 1 Min)

Connectionless service and arbitrary interaction are the characteristics of\_\_\_\_\_.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ TCP
- ☐ UDP
- ☐ IP
- ☐ ICMP

**Made by: Waqar Siddhu**



Question No : 15 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ provides application-to-application communication, also called end-to-end communication.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ IP

☐ Transport Protocol

☐ RIP

☐ ARP

**Made by: Waqar Siddhu**

Question No : 16 of 52

Marks: 1 (Budgeted Time 1 Min)

Three-way handshake is used to create a connection and requires each end to generate a random \_\_\_\_\_ sequence number.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ 8-bit

☐ 64-bit

☐ 32-bit

☐ 16-bit

**Made by: Waqar Siddhu**

Question No : 17 of 52

Marks: 1 (Budgeted Time 1 Min)

The time for arrival of acknowledgement packet depends upon \_\_\_\_\_.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Distance to destination and current traffic conditions

☐ Current traffic conditions

☐ Distance to destination

☐ Nature of the data

**Made by: Waqar Siddhu**



Question No : 18 of 52

Marks: 1 (Budgeted Time 1 Min)

The routers within an autonomous system use a \_\_\_\_\_ to exchange routing information.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Exterior Gateway protocol (EGPs)
- ☐ Both Interior Gateway protocols (IGPs) and Exterior Gateway protocol (EGPs)
- ☐ Border Gateway Protocol (BGP)
- ☐ Interior Gateway protocols (IGPs)

**Made by: Waqar Siddhu**

Question No : 19 of 52

Marks: 1 (Budgeted Time 1 Min)

Which of the following are interior routing protocols ?

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ RIP and BGP
- ☐ OSPF and BGP
- ☐ BGP and OSPF
- ☒ RIP and OSPF

correct

**Made by: Waqar Siddhu**

Question No : 20 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ use IP-in-IP encapsulation to send multicast datagrams from one site on the Internet to another.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Distance Vector Multicast Routing Protocol
- ☐ Core Based Trees
- ☐ Protocol Independent Multicast \_ Sparse Mode
- ☐ Protocol Independent Multicast \_ Dense Mode

**Made by: Waqar Siddhu**



Question No : 21 of 52

Marks: 1 (Budgeted Time 1 Min)

A multicast routing scheme in which the protocol software builds a delivery tree from a central point is called \_\_\_\_\_.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Protocol Independent Multicast \_ Sparse Mode
- ☐ Protocol Independent Multicast \_ Dense Mode
- ☐ Distance Vector Multicast Routing Protocol
- ☐ Core Based Trees

**Made by: Waqar Siddhu**

Question No : 22 of 52

Marks: 1 (Budgeted Time 1 Min)

In which method of Address Resolution Protocol, address change affects all hosts?

Where "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ T
- ☐ C
- ☐ D
- ☐ T, C

**Made by: Waqar Siddhu**

Question No : 23 of 52

Marks: 1 (Budgeted Time 1 Min)

In which method of Address Resolution Protocol the protocol address is determined by hardware address?

Where "T" stands for Table lookup, "C" for Closed-form Computation and "D" for Data Exchange

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ T
- ☐ D
- ☐ C
- ☐ T, C

**Made by: Waqar Siddhu**



Question No : 24 of 52

Marks: 1 (Budgeted Time 1 Min)

ARP is almost always used to bind a \_\_\_ bit IP address to a \_\_\_ bit Ethernet address.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ 32, 48

☐ 48, 32

☐ 32, 64

☐ 32, 128

**Made by: Waqar Siddhu**

Question No : 25 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ has no way to determine the cause of the problem.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ ICMP

☐ ARP

☐ Ping

☐ Traceroute

**Made by: Waqar Siddhu**

Question No : 26 of 52

Marks: 1 (Budgeted Time 1 Min)

A network which is based on packets uses a computer which may have \_\_\_\_\_, memory and \_\_\_\_\_ for switching.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Administration Rights, Algorithm

☐ Source address, Destination address

☒ Interface, Program

**correct**

☐ Input, Output

**Made by: Waqar Siddhu**



Question No : 27 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ places the boundary between third and fourth octets.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Class A
- ☐ Class B
- ☐ Class C
- ☐ Class D

**Made by: Waqar Siddhu**

Question No : 28 of 52

Marks: 1 (Budgeted Time 1 Min)

The address \_\_\_\_\_ identifies the physical network to which the computer is attached, while the \_\_\_\_\_ identifies an individual computer on that network.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Prefix , prefix
- ☐ Suffix , prefix
- ☐ Suffix, suffix
- ☐ Prefix, suffix

**Made by: Waqar Siddhu**

Question No : 29 of 52

Marks: 1 (Budgeted Time 1 Min)

Dotted decimal notation is a syntactic form the IP software uses to express \_\_\_\_\_ bit binary values when interacting with humans.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ 16
- ☐ 24
- ☐ 32
- ☐ 64

**Made by: Waqar Siddhu**



Question No : 30 of 52

Marks: 1 (Budgeted Time 1 Min)

Find the class of the address.

10100111.11011011.10001011.01101111

Answer ( Please select your correct option )

WWW.VirtualAcademyLive.com

A

☐

B

☐

E

☐

C

☐

Made by: Waqar Siddhu

Question No : 31 of 52

Marks: 1 (Budgeted Time 1 Min)

Find the class of the address:

11110011.10011011.11111011.00001111

Answer ( Please select your correct option )

WWW.VirtualAcademyLive.com

A

☐

C

☐

E

☐

B

☐

Made by: Waqar Siddhu

Question No : 32 of 52

Marks: 1 (Budgeted Time 1 Min)

Virtual packets serve same purpose on \_\_\_\_\_ as frames on \_\_\_\_\_

Answer ( Please select your correct option )

WWW.VirtualAcademyLive.com

Intranet, LAN

☐

Internet, WAN

☐

Intranet, WAN

☐

Internet, LAN

☐

Made by: Waqar Siddhu



Question No : 33 of 52

Marks: 1 (Budgeted Time 1 Min)

A \_\_\_\_\_ is a special-purpose device dedicated to the task of interconnecting networks.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Router

☐ Hub

☐ Switch

☐ Repeater

**Made by: Waqar Siddhu**

Question No : 34 of 52

Marks: 1 (Budgeted Time 1 Min)

IPv6 addresses are of \_\_\_\_\_.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ 128 bytes

☐ 32 bits

☒ 128 bits



correct

☐ 64 bits

**Made by: Waqar Siddhu**

Question No : 35 of 52

Marks: 1 (Budgeted Time 1 Min)

NEXT HEADER field in the base header defines type of header and it appears at the end of \_\_\_\_\_ base header.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Fixed-size

☐ Static

☐ Variable size

☐ Dynamic

**Made by: Waqar Siddhu**



Question No : 36 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ is called an end-to-end protocol because it provide a connection directly from an application on one computer to an application on a remote computer.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ UDP

☐ TCP

☐ ICMP

☐ IP

**Made by: Waqar Siddhu**

Question No : 37 of 52

Marks: 1 (Budgeted Time 1 Min)

A one-to-many communication between a source and a specific group of hosts is classified as a \_\_\_\_\_ communication.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ Unicast

☐ Multicast

☐ Broadcast

☐ Unicast & Multicast

**Made by: Waqar Siddhu**

Question No : 38 of 52

Marks: 1 (Budgeted Time 1 Min)

\_\_\_\_\_ includes 32-bits address mask with each address to make the address class full, classless or sub netted.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

☐ RIP

☐ OSPF

☐ BGP

☐ IGP

**Made by: Waqar Siddhu**

Question No : 39 of 52

Marks: 1 (Budgeted Time 1 Min)

Which of the following protocols use(s) UDP for the transmission of all type of message?

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ RIP
- ☐ OSPF
- ☐ BGP
- ☐ RIP and OSPF

**Made by: Waqar Siddhu**

Question No : 40 of 52

Marks: 1 (Budgeted Time 1 Min)

In TCP when a computer sends a segment, the \_\_\_\_\_ and \_\_\_\_\_ fields refer to incoming data.

Answer ( Please select your correct option )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

- ☐ Acknowledgement number, Window
- ☐ Sequence number, Window
- ☐ Acknowledgement number, Sequence number
- ☐ Source address, Sequence number

**Made by: Waqar Siddhu**

Question No : 41 of 52

Marks: 2 (Budgeted Time 4 Min)

How can we say that the bridge is an intelligent device? Give two reasons.

Answer ( Please [click here](#) to Add Answer )

[WWW.VirtualAcademyLive.com](http://WWW.VirtualAcademyLive.com)

Rich text editor toolbar with icons for Bold, Italic, Underline, Text Color, Background Color, Bulleted List, Numbered List, Indent, Outdent, Link, Unlink, and a 100% zoom level.

**Made by: Waqar Siddhu**



Question No : 42 of 52

Marks: 2 (Budgeted Time 4 Min)

During transmission of data from source to destination in a network of 50 computers, some packets contain errors. In this situation, which field of IP datagram header will indicate about errors?

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

**Made by: Waqar Siddhu**

Question No : 43 of 52

Marks: 2 (Budgeted Time 4 Min)

Connectionless and connection oriented both protocols have different qualities in communication. UDP belongs to which category?

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

**Made by: Waqar Siddhu**

Question No : 44 of 52

Marks: 2 (Budgeted Time 4 Min)

OSPF protocol is being used to replace the older RIP protocol in the Internet routing process. Discuss, does OSPF only share information within an area or among different areas?

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

**Made by: Waqar Siddhu**



Question No : 45 of 52

Marks: 3 (Budgeted Time 6 Min)

Do all LAN technologies include a type field in frame? Justify your answer with three reasons.

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

**Made by: Waqar Siddhu**

Question No : 46 of 52

Marks: 3 (Budgeted Time 6 Min)

Internet layer receives and sends packets for the network. It contains the powerful protocols like IP, ARP and ICMP. Which types of errors internet layer can detect? Just enlist any three names.

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

**Made by: Waqar Siddhu**

Question No : 47 of 52

Marks: 3 (Budgeted Time 6 Min)

TCP is widely used because TCP connections deliver the data from one end to other end in real. So why TCP connections are called Virtual Connections? Give at least three reasons.

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

**Made by: Waqar Siddhu**



Question No : 48 of 52

Marks: 3 (Budgeted Time 6 Min)

It is very tedious work to manage a multicast type of transmission in an IP network but some characteristics are there which not only make IP multicast easy but also make it unique. You are required to describe these characteristics in detail.

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

Made by: Waqar Siddhu

Question No : 49 of 52

Marks: 5 (Budgeted Time 10 Min)

As you know all current standards use the general frame format, write the names of five frame fields and mention how much space each field, contains?

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

Made by: Waqar Siddhu

Question No : 50 of 52

Marks: 5 (Budgeted Time 10 Min)

Suppose ABC University has different heterogeneous computer networks where fragmentation technique is used to solve the problem of varied networks. How does it work with different MTU sizes datagrams? Justify your answer with at least five solid reasons.

Answer ( [Please click here to Add Answer](#) )

WWW.VirtualAcademyLive.com

Normal Arial 12 B I U

Made by: Waqar Siddhu



Question No : 51 of 52

Marks: 5 (Budgeted Time 10 Min)

Suppose a security agency wants to reduce the risk of data being compromised in its TCP based computer network. Which process is used by TCP to establish reliable connection and explain the process by giving all steps involved in this process?

Answer ( Please [click here](#) to Add Answer )

**WWW.VirtualAcademyLive.com**



**Made by: Waqar Siddhu**

Question No : 52 of 52

Marks: 5 (Budgeted Time 10 Min)

Suppose an organization has more than one autonomous system where EGP is used to exchange routing information between networks. Justify with reasons why EGP does not use routing metrics? Briefly explain with an example.

Answer ( Please [click here](#) to Add Answer )

**WWW.VirtualAcademyLive.com**



**Made by: Waqar Siddhu**