

INFORMATION TECHNOLOGY  
PRACTICE QUESTIONS  
CHAPTER 4

# Data Communication

1. Why do organizations require an efficient data communication system?  
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2. Define the term “*Data Communication*”?  
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3. List the items that make up a data communication system?  
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.....
4. What do data communication systems use to carry data from one location to another?  
.....
5. Bandwidths are classified into three (3) channels, each with its own data transfer speed. Name these channels and the speed at which they transfer data?  
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.....  
.....
6. Name the other types of channels. Where are can they be found?  
.....  
.....  
.....
7. This item of equipment is used to connect local area network (LAN) is called  
.....
8. These lines are classified according to the direction of data flow through them.  
They are called .....

## COMMUNICATION CABLE AND TRANSMISSION LINES

9. Enter the cables or transmission lines names to match their characteristics.

	Characteristics	
	It is a cheap and convenient method of connecting computers and peripherals in a network. Used mainly for home and small business networks.	
	More expensive. It transmits voice, video and data and is ideally used to connect medium size networks.	
	Are relatively expensive and transmit digital data at extremely fast speeds virtually error-free.	
	Very high frequency radio signals transmitted through space	
	Accepts signals beamed from a point on earth. These signals are then reflected to another point.	
	Data flows in one direction. Data can be sent or received, but not both.	
	Can alternatively send or receive data, but not at the same time.	
	Can simultaneously send and receive data at the same time.	

## NETWORK TYPES

10. LAN can be divided into two categories based on how the computers on the network communicate with each other. Identify them and state difference?

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11. Give the full meaning of following networks acronyms, state their main characteristics and give two (2) advantages and disadvantages of each network:

a. LAN

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b. WAN

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c. Wireless WAN

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d. Internet

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e. Intranet

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12. The LAN network has three (3) distinct topologies (types). Identify them, state their main characteristics and give two advantages and disadvantages:

(i) .....  
.....

.....  
(ii) .....

.....  
(iii) .....

### The INTERNET

13. Who owns the internet?

.....

14. List the hardware requirements needed to access the internet?

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.....  
.....  
.....

15. Name some organizations or businesses that use the internet to communicate with each other and the wider world?

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### COMMUNICATION LINKS

16. Computers on the internet are linked using different communication links. Name them and give a brief description of how they operate and what is needed for these links to operate.

a. ....

.....

b. ....

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- c. ....  
.....
- d. ....  
.....

## INTERNET SOFTWARE REQUIREMENTS

17. Two (2) software is required for users to connect to, access information and other services on the internet. Name them and give a brief description of each?

(i) .....  
.....

(ii) .....  
.....

18. Name some internet browsers?

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.....  
.....

19. List the functions that internet browsers allow you to perform using the internet?

(i) .....

(ii) .....

(iii) .....

(iv) .....

(v) .....

(vi) .....

(vii) .....

(viii) .....

## INTERNET SERVICES

20. There are four (4) major types of services available on the internet. Name them and state the services users can access under each?

a. ....

(i) .....

1. ....

2. ....

(ii) .....

1. ....

2. ....

3. ....

a. ....

b. ....

c. ....

d. ....

4. ....

b. ....

.....

.....

c. ....

.....

.....

d. ....

**FINDING INFORMATION ON THE WEB**

21. There are five (5) methods used to find information on the World Wide Web. Name them and give a brief description of how they operate?

a. ....

.....

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b. ....

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c. ....

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d. ....

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e. ....  
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