

Zahid Notes

1st Year Computer Science

Chapter 5: Network Communication and Protocols

Federal Board (FBISE) | Proper Notes for Exam Preparation

PROPER NOTES IN ENGLISH: Detailed explanations, examples, solved short and long answers, MCQs and a revision plan.

These notes are written in original words for practice and exam preparation. They are not a copy of the official textbook and they are not a board paper. Students should also read the textbook, because board questions come from the prescribed syllabus.

1. Introduction and Detailed Explanation

A network means two or more computers joined together so that they can share data and resources. Through a network, one printer or one internet connection can be used by many people.

A LAN is a network of a small area, such as a school or an office. A WAN is a network spread over a large area, such as between countries. The internet is the largest example of a WAN.

A protocol is a set of rules that tells how computers will communicate with each other. Without a protocol, computers cannot understand each other, even if they are connected.

Why Networks are Useful

Networks save money because resources can be shared. They save time because data can be sent quickly from one computer to another. They also make communication easy, because people in different places can work on the same data.

Client and Server

In many networks, one computer is a server and the others are clients. The server provides data and services. The clients request data and services from the server. For example, when a student opens a website, his computer is the client and the website computer is the server.

2. Important Definitions

Network

A group of computers joined together to share data and resources.

LAN

Local Area Network, a network of a small area such as one building.

WAN

Wide Area Network, a network spread over a large area, such as the internet.

Protocol

A set of rules that makes communication between computers possible.

Server

A computer that provides data and services to other computers on a network.

3. Solved Short Questions

Q1. What is a network?

A network is two or more computers joined together to share data and resources.

Q2. Differentiate between LAN and WAN.

A LAN is a network of a small area. A WAN is spread over a large area.

Q3. Why is a protocol necessary?

So that all computers communicate by the same rules and can understand each other.

Q4. What is a server?

A computer that provides data and services to other computers on a network.

4. Solved Long Questions

Q1. Explain networks, their types and their uses.

A network is formed when computers are connected to each other. Its main purpose is sharing. A LAN covers a small area, such as a school, where computers in different rooms can share a printer and files. A WAN covers a large area, such as cities and countries, and the internet is its largest example. Networks are useful because they save money, save time and make communication easy. For their working, protocols are necessary. A protocol is a set of rules for communication. Without common rules, connected computers cannot understand each other.

5. MCQs, Fill in the Blanks and True / False

1. A network of a small area is:

- A. WAN
- B. LAN
- C. Internet
- D. Server

Correct answer: B

2. The rules for communication between computers are called:

- A. Hardware
- B. Protocol
- C. Software
- D. Data

Correct answer: B

3. The internet is an example of:

- A. LAN
- B. WAN
- C. PAN
- D. ROM

Correct answer: B

6. Important Points and Revision Plan

LAN = small area, WAN = large area

Protocol = rules of communication

Network = joining for sharing

- Read the detail once and write the definitions in your own words.
- Write the short and long answers yourself, then match them with the notes.
- Solve the MCQs and read the important points box again before the test.