UNIT 3

1. Past Simple Tense (I did)

1.1 Definition

A fundamental grammatical structure for describing completed actions, finished events, and states that happened at a specific time in the past. In both technical and scientific writing. The past simple tense is used frequently to relate experimental procedures, describe engineering tasks completed, and summarise past behaviour of a system.

1.2 Time reference

Examples of typical time expressions include:

Last year, yesterday, two days ago, in 2020, during the previous semester, previously, in the past.

Example:

• The engineers corrected the sensors last weekend.

• The PLC programme collapsed during the first test.

1.3 Simple past tense structure

A. Affirmative form

• **Regular verbs: base verb + -ed**

The team introduced a new control procedure.

• **Irregular verbs: special past tense form**

The machine worked perfectly for eight hours.

B. Negative form

• **did not + base verb**

The motor did not run correctly.

The monitor did not transmit the correct message.

C. Interrogative form

• **Did + subject + base verb?**

Did the engineers finish the installation?

Did the energy monitor measure the temperature settings?

2. Text study: Evolution of an Automated Monitoring System

Read the text carefully

In 2024, a multidisciplinary automation engineering team **conducted** a comprehensive modernization of an industrial monitoring system used in a chemical processing plant. The project **began** when the company **reported** persistent inconsistencies in data acquisition and equipment diagnostics. Initially, the engineers **examined** the legacy infrastructure and **detected** several communication faults between the sensors and the central controller.

To address these issues, the team **developed** a new architecture based on modular components. They **replaced** obsolete analog sensors with digital, high-precision models and **integrated** an upgraded Human–Machine Interface (HMI). After implementing these changes, the engineers **carried out** multiple validation tests, during which they **identified** minor calibration errors. They immediately **corrected** them and **performed** a series of verification cycles to ensure operational reliability.

Once the system **met** all performance criteria, the company **authorized** its deployment across the entire plant. As a result, the modernized system **enhanced** diagnostic accuracy, **reduced** downtime, and **strengthened** safety monitoring throughout the production environment.

3. Reading Comprehension Activities

3.1 Answer the following questions

1. What problems did the company initially report?
2. What did the engineers detect during the initial examination?
3. Which components did the team replace?
4. What type of tests did the engineers conduct?
5. What were the final benefits of the upgraded system?

3.2 True or False

1. The modernization project took place in a pharmaceutical plant.
2. The engineers found communication faults in the system.
3. They replaced digital sensors with analog ones.
4. The engineers corrected all calibration errors.
5. The new system improved diagnostic accuracy.

4. Grammar Exercises

4.1 Put the verbs in brackets into the past simple

1. The team ..... (evaluate) the system architecture in detail.

2. The technician..... (record) the voltage variations during the test.
3. The robot..... (operate) continuously for eight hours.
4. The engineers ..... (discover) an unstable connection.
5. The company ..... (implement) new safety protocols.

4.2 Negative Form Transformation

Rewrite the sentences in the negative form:

1. The actuator reached its maximum speed.
2. The PLC transmitted the correct data.
3. The operators understood the updated interface.

4.3 Interrogative form

Express questions:

1. The team analyzed the error logs.
2. The controller activated the emergency mode.
3. The sensor responded to the temperature change.

5 Vocabulary exercise.

A. Match the words with their meanings

Word	Meaning
1. diagnostics	a. the act of releasing a system into real operation
2. inconsistency	b. structure and organization of a system
3. architecture	c. test sequence used to confirm correct operation
4. deployment	d. lack of uniformity or reliability
5. verification cycle	e. procedures used to identify system faults

5.2 Fill in the blanks with suitable terms

Use: integrated – configured – malfunction – protocol – assessed

1. The engineers carefully ..... the system requirements.
2. They ..... the sensors into the new communication network.
3. A communication ..... occurred during the test.
4. The technician ..... the controller settings.
5. The company adopted a new operating..... .

6. Translation (English → French)

Translate the following sentences:

1. The engineers conducted several tests before finalizing the system.
2. The controller did not detect any major fault.

3. The team improved the reliability of the production line.
4. The sensors measured the temperature with high accuracy.
5. The company launched the upgraded system last month.

7. Writing Task

Prepare a paragraph describing an automation experiment, experiment, or industrial project in the past.

The paragraph should:

- include a minimum of eight verbs in the past tense,

- use technical vocabulary (sensor, controller, actuator, diagnostics, programme, calibration),

- describe a sequential operation.

8. Academic Quiz

1. The past simple is primarily used to describe:
   a) general truths
   b) completed past events
   c) future expectations
2. Choose the correct form:
   "The system ..... after the technician adjusted the settings."
   a) stabilised
   b) stabilises
   c) stabilising
3. Which verb is irregular?
   a) installed
   b) upgraded
   c) detected
   d) built
4. Negative form:
   "The controller executed the command." →
   a) The controller didn't execute the command.
   b) The controller didn't executed the command.
   c) The controller not execute the command.
5. Past simple of **run** is:
   a) runned
   b) ran
   c) run
6. Choose the correct option:
   "The engineers ..... all components before installation."
   a) check
   b) checked
   c) checking

7. Question formation:
   "..... the team complete the system validation?"
   a) Does
   b) Did
   c) Do
8. Vocabulary: "deployment" refers to:
   a) testing a system
   b) installing a system for actual use
   c) analyzing a system
9. Identify the correct sentence:
   a) The device stoped functioning.
   b) The device stopped functioning.
   c) The device stopping functioning.
10. "The engineers recalibrated the sensors." Rewrite the negative form:
    a) The engineers didn't recalibrated the sensors.
    b) The engineers didn't recalibrate the sensors.
    c) The engineers not recalibrate the sensors.