**Testing Theory**

Quality

Requirements

**Fundamental Testing process**

SDLC & STLC

**Test Documentation**

Test Strategy

Test Plan

Test Scenario

Test Suite

Test Case

Check List

Test Report

Requirements Traceability Matrix

Bug Report

Flowchart

Bug Report, misc.

**Jira**

**Levels and Types of Testing**

Software Testing Levels

Software Testing Types

**Test Design**

Test Design

Test Design Techniques

**PICT**

**Software Development Methodologies**

Traditional Models

Agile Methodologies

SCRUM

KANBAN

Approaches to development/testing

**Version control system GIT**

**UI Elements**

**HTML & CSS**

HTML

HTML misc.

CSS

**Databases**

Database & Database Management System

SQL

Databases, misc.

**Client-Server**

Client-Server model

Client-Server model, misc.

**API**

Application Programming Interface

Web-Service

REST & SOAP

JSON & XML

**Postman**

**Newman**

**Swagger**

**SoapUI**

**Curl**

**Performance Testing**

Performance Testing

**JMeter**

**BlazeMeter**

**Grafana**

**Telegraf**

**CI/CD**

Continuous Integration / Continuous Delivery

**Jenkins**

**Tomcat**

**Computer Networks**

Computer Networks

OSI Model

TCP/IP Model

Level 1 – Physical level

Level 2 – Data Link level

Ethernet technology

MAC-addresses

Access method CSMA/CD

VLAN

STP protocol

Wi-Fi

Access method CSMA/CA

Wi-Fi frame format

Level 3 – Network level

IP protocol

Routing

Fragmentation

Network layer control protocols

DHCP protocol

ARP protocol

ICMP protocol

Packet transmission on the Network and Data Link levels

Level 4 – Transport level

UDP protocol

TCP protocol

Socket Interface

Protocols, interfaces and services

Network Address Translation (NAT)

Brandmauer / Firewall

Level 5 – Session level

Level 6 – Presentation level

Level 7 – Application level

DNS – Domain Name System

DNS protocol

HTTP protocol

Persistent connection in HTTP

Caching in HTTP

Cookies in HTTP

HTTP & HTTPS

HTTP, misc.

E-mail – Electronic mail

Email protocol SMTP

Email protocol POP3

Email protocol IMAP

FTP protocol

TELNET protocol

SSH protocol

Nets, misc.

**Charles Proxy**

**Fiddler**

**Packet Tracer**

**Virtualization**

**VirtualBox**

**UNIX / Linux**

UNIX

Linux

**Terminal**

**VI / VIM**

Linux, misc.

**Mobile**

Mobile testing

iOS / Android

Mobile, misc.

**ADB**

**Automation**

Automation Testing

**Katalon**

**Programming**

Procedural Programming

Object-Oriented Programming

**Java**

Programming misc.

**Security**

Security testing

SSL / TLS

SSH

SQL Injection

XSS

Security misc.

**Sqlmap**

**Test Management**

Test Management

Test Metrics

Hazards and Risks

Manage People

**Appendix 1**

Test Case Examples

**Appendix 2**

Requirements for LOGIN and PASSWORD inputs.