***Q: Complete these definitions with jobs in ICT.***

A **hardware engineer** manages the hardware and software that comprise a network.

A **blog administrator** edits and deletes posts made by contributers to a blog.

A computer security specialist works with companies to build a secure computer systems.

A **help desk technician** helps end-users with their computer problems in person, by email or over the phone.

***Q: Name three video game platforms:***

Personal computer

Consoles

Portable devices

***Q: Name five video game genres /do not use abbreviations/:***

role playing game

first person shooter

real time strategy

strategy

multiplayer online battle arena

sports game

adventure game

***Q: Answer the following:***

**Which unit of measurement is used in nanotechnology?**

nanometres

**Write three advantages of nanotubes over regular materials:**

more flexible, more resistant, more durable

***Q: Match the words with their definitions. Two extra words are given which do not match:***

1 – appliances, 2 – embedded, 3 – nanotubes, 4 – biometrics, 5 – android, 6 – nanobot, 7 – robotics.

a. A robot that resembles a human. 5

b. Integrated, inserted into 2

c. A microscopic robot, built with nanotechnology 6

d. Biological identification of a person 4

e. Electrical devices or machines, used in the home 1

***Q: Some statements about Java are true, some are false. Correct the false ones:***

Java was invented by Microsoft. F (by Sun microsystems)

Java is compatible with most computing platforms. T

With the interpreter, a program is first converter into Java bytecodes. T

***Q: Match the words 1 - 6 with the words a - f to make technical terms.***

1 Java a. applet

2 Operating b. page

3 Programming c. code

4 Web d. system

5 Source e. object

6 Graphical f. language

1A, 2D, 3F, 4B, 5C, 6E

***Q: Give the term for definition:***

**Basic computer languages consist of 1 and 0.**

machine code

**Technique of detecting and correcting errors in programs.**

debugging

**Diagram representing the succesive logical steps of the program.**

flowchart

**Companies whose actitivies are centred on the Internet are called**

.dotcoms

**Companies having both physical and online presence are**

bricks and clicks

**„B2B“ in B2B commerce means**

business to business

**It holds credit card data and passwords for logging into websites**

digital wallet / cookies

***Q: Give a short answer to the following questions:***

**What is the function of an assembler?**

To translate program into a machine code

**What are markup tags?**

Instructions in markup language

**What does COBOL stand for?**

Common business oriented language

**What’s the difference between HTML and XML?**

XML allows to define custom tags.

***Q: E-commerce websites use the following components. Write the correct terms for the following definitions, do not use abbreviations.***

**Web-based software application to keep a record of the products chosen by the customer.**

**s**hopping **c**art **p**rogram

**Type of certificate, which makes credit card tranction secure (shown by a small padlock)**

**s**ecure **s**ocket **l**ayer

**An interface between the website and the bank that accepts the electronic payment.**

**p**ayment **g**ateway

***Q: Banks offering internet based products use different security. Complete with the correct expression:***

The **biometric** authentification, e.g. fingerprint, to identify the user of the bank account.

For some transactions, customers need to use TAN, which is **transaction authorisation number.**

Traditional banks with no online services were called **brick** and **mortar** banks.

***Q: Give terms for the following Web page elements:***

Web editors are user-friendly WYSIWYG, which means **what you see is what you get**.

A method of displaying multiple HTML documents in the same browser window. **Frames**

Columns and rows used to position images and text on a page. **Tables**

If you want to share information with people you can use RSS **feeds**.

***Q: Complete the right terms dealing with networks.***

**The language or set of rules that computers use to communicate with each other.**

network protocol

**The type of network in which all computers have the same capabilities.**

peer to peer

**The type of network in which all data flows throught a central hub, common conection point** **for the devices in the network.**

star

**The type of network in which all devices are connected to one another in a continuous loop.**

ring

**The network in which one computer acts as the main computer, stores and distributes data** **to other nodes.**

client server

**The wireless networks use \_\_\_\_\_\_\_\_\_\_ to transmit data.**

electromagnetic waves

**The device which allows computers on a local network to share an internet connection.**

modem router

**The device that serves as a common connection port for devices in a wireless network.**

wireless access point

**The cables uses to transfer information for the internet over long distances at high speed.**

fibre optic cable

***Q: Choose the correct ending for the sentence beginnings:***

1 – The CPU processes data and a – performs logical operations

2 – The control unit is part of the CPU that b – you cannot makes changes to it

3 – ROM memory is permanent and c – coordinates the other parts of PC

4 - RAM memory is volatile and d – makes calculations

e – holds data only when the PC runs

f – controls execution of instructions

1A, 1C, 1D , 2F, 3B, 4E

***Q: Complete the missing word.***

The BIOS stands for **basic input/output system**

The ROM stands for **read only memory.**

Signals measuring and synchronizing the flow of data are sent out by **the clock.**

A bit is short for **binary digit.**

***Q: Are the statements TRUE or FALSE?***

The front side bus carries all data that passes from the CPU to the other devices. – T

The word „protocol“ refers to the shape of the network. – F

Routers are used to link two computers. – F

Access points do not need to be connected to a wired LAN. – F

Wireless adapters are necessary when you are useing a WLAN. – T

***Q: Complete the sentences with the right word from:***

router, WLAN, peer-to-peer, hub, server, ring, backbones, nodes.

-A powerful PC with a large hard disk that can be shared by everyone is a **server**.

-**Peer-to-peer** networking allows each user to share resources such as printers.

-The star is a topology for a computer network in which one computer occupies the central part and the remaining **nodes** are linked only to it.

-A device that forwards data packets and links a LAN to another network is **router**.

***Q: Give a name for the following Internet crimes:***

The illegal copying and distribution of copyrighted sofware. – **Piracy**

Email fraud to obtain money / valuables. – **Scam**

Online harassement / abuse. – **Cyberstalking**

Bank fraud to obtain password of Internet bank accounts. – **Phishing**

Self-copying programs that can mvoe from one PC to another without human help. – **Worms**

***Q: Fill in the gaps with the following words:***

Virus, scanner, spyware, antivirus, firewall, digital certificate, malware

Malicious software, **malware**, can be avoided by following some basic rules.

Internet users who liek cybershopping should get a **digital certificate**, an electronic identity card.

To prevent crackers from breaking into your internal network install a **firewall**.

It will protect you from **spyware**.

If you have been hit by a **virus** download a clean-up utility and always use an **antivirus** program, e.g., a virus **scanner**.

***Q: Banks offering Internet-based products should use two-factors autentification:***

The PIN that is **confidential/mandatory/personal indentification number.**

**Security tokens**, which are microchip-based devices that generate a number the user has to type.

The **biometric** authentication, e.g. figerprint, to identify the user of the bank account.

For some transactions, customers need to use TAN, which is **provided by the bank**. / **transaction autorization number.**

Banks that do not have physical branches are called **virtual** banks.

The use of wireless networks to access banks is known as **wireless** banking.

The banks send short message **notifications** to the customer’s e-mail or mobile phone.

***Q: Match the needs classified by Maslow to the following explanations:***

Physiological needs Desire to achieve one’s goals

Security needs Sleep, food

Esteem needs Clothing, shelter, keep one’s job

Self-actualisation needs Belong to a group

Social needs Desire for power, status, self-confidence

1B, 2C, 3E, 4A, 5D