

TEST

Names: Martin Ivelinov Popov, FN: 82134, Major: Computer Science, Group: 1, Date 12.11.2021

1. Which device (a-h) would you use for the tasks (1-8)? (...../8)

1. to show data on the screen	b	a/ scanner
2. to capture moving images and then download them to the computer	f	b/ monitor
3. to read price labels on products sold in shop	d	c/ webcam
4. to read text or pictures from papers and transfer the information onto the computer	d	d/ bar code reader
5. to type text into a computer	a	e/ graphics tablet
6. to select menu options, text and graphics displayed on the monitor	g	f/ digital video camera
7. to send live video images via the Internet	h	g/ keyboard
8. to enter drawings and sketches into the computer	c	h/ mouse
	e	

2. Complete each sentence using the words in brackets and one of these suffixes. (...../7)

Adjective suffixes: -ful, -less, -ive, -ed, -al, -y, -ic

Noun suffixes: -tion, -er, -ing, -logy, -ness

2.1 We are the world's leading manufacturer of digital cameras for professional photographers. (**manufacture**)

2.2 We offer the most advanced technology in printing services. (**techno**)

2.3 The amount of light produced by an LCD screen is called brightness, or luminance, measured in cd/m².

(**bright**)

2.4 A wireless mouse has no cable and an optical mouse has no ball. (**wire**)

2.5 This camcorder will give you rich colourful pictures thanks to its CMOS sensor. (**colour**)

2.6 A digital camera uses a digital image sensor instead of photographic film. (**photograph**)

2.7 New digital cameras offer innovative features such as Bluetooth connectivity. (**innovate**)

3. Complete the gaps with the following words: pixels, magnifier, ergonomics, widescreen, Braille, textphone (...../12)

3.1 A screen magnifier enlarges text and graphics on the screen, increasing the legibility.

3.2 The universal system of writing and printing for the blind is called Braille.

3.3 A textphone has a screen and a keyboard that transcribes spoken voice as text, it is ideal for deaf people.

3.4 A widescreen display has an aspect ratio of 16:9, ideal for watching movies.

3.5 Characters and pictures are made up of coloured dots called pixels.

3.6 Computer ergonomics refers to the position of your body in relation to the computer, including the chair, the desk and the monitor.

4. What do the abbreviations stand for? (...../12)

4.1 LCD – liquid crystal display

4.2 CRT – cathode-ray tube

4.3 RSI – repetitive strain injury

4.4 dpi – dots per inch

4.5 WAI – web application interface

4.6 USB – universal serial bus

5. Describe the use of these devices. Example: (...../12)

A digital camera is used to take and store images as digital data, which can then be processed by a PC.

5.1 A printer is used to transfer information from the computer onto paper

5.2 A touch screen is a technology used in smartphones, serving the purpose of operating with the device via touching the screen with our fingers.

5.3 A game controller is a device, used to play a specific game, most commonly used to move the game character.

6. *Complete the sentences using the comparative or superlative form of the adjectives in brackets. (...../7)*

- 6.1 Laser printers are usually (fast) faster than inkjets, printing text pages at a speed of 10 to 20 ppm, and are (cheap) cheaper to operate.
- 6.2 The human brain is far (powerful) more powerful than the (advanced) computer working at its full capacity.
- 6.3 I recommend getting the (high) highest resolution monitor you can afford.
- 6.4. Plasma screens are (heavy) heavier than LCD screens.
- 6.5. The ILOVEYOU computer bug is (bad) the worst virus in computer history.
- 6.6 Film scanners are more expensive (expensive) than flatbeds, usually starting at 250 pounds.
- 6.7 This printer has been ranked as (little reliable) the least reliable on the market.

7. *Explain these noun phrases. Example: a disk controller – a chip that controls a disk drive (...../6)*

- 7.1 A speech recognition system – a system used to translate human speech into text
- 7.2 A voice-activated computer – a computer that is activated by human voice
- 7.3 A drawing and painting program – a program used to draw and paint

8. *Read the text and find the following: (...../12)*

- 8.1 A type of interface that allows users to select things by checking on items and menus: GUI
- 8.2 The technique which uses a computer model or program to reproduce a particular situation: VR
- 8.3 A device used to manipulate and move virtual objects with your hands: joystick
- 8.4 Devices which contain movement sensors: motion detectors
- 8.5 The machine that simulates flying conditions: flight simulator
- 8.6 Machines designed to operate in dangerous environments: remotely operated robots

Virtual Reality Devices

The most common user interface in computing today is a graphical user interface, or GUI. Typically, a GUI includes menus, windows, icons, buttons, and a mouse as pointing device. But with the development of virtual reality (VR) techniques, a different type of interface has emerged: a virtual interface. VR uses 3 -D graphics and computer simulation to generate an imaginary world in which the user can move.

In a virtual interface, you put on a head-mounted display (HMD) to see the pictures, which make you feel as if you are in a 3-D world. Most HMDs have two displays and provide stereoscopic vision.

You also use sophisticated controlling devices, such as 3-D joysticks, gloves, special suits and motion detectors. A virtual mouse, trackball or joystick is used to move around the space you are exploring. A data glove (or VR glove) has pressure pads and sensors on the fingers which make you feel as if you are picking up objects and touching things. Full body suits with position and bend sensors are used for capturing motion. Motion detectors allow the machine to sense when and how you move.

VR systems are already being used in fields like video games, architectural design and virtual exhibitions. Other VR applications allow participants to view reality from an advantageous position, for example simulators and telepresence systems. In simulators, scientists recreate a particular condition or situation by using a computer program to reproduce it. For example, pilots use flight simulators to do their training. A telepresence system connects remote sensors in the real world with the senses of a person; for instance, doctors use tiny instruments and camera on cables to do complicated surgery, and scientists use remotely operated robots to work in dangerous conditions, to explore volcanic activity, the depths of the ocean, or outer space.

9. *Find the words in the text with the following meanings: (...../4)*

- 9.1 Artificial reality or environment generated by computers: virtual reality
- 9.2 User interface based on virtual reality: virtual interface
- 9.3 A video display that a person wears in front of the face: head-mounted display
- 9.4 Effect of perceiving a 3-D world by sending two views to the user's right and left eye: simulation

Total/80