Name:_____   ID:_____   Signature: _____

İSTANBUL TECHNICAL UNIVERSITY
Department of Computer Engineering
BLG103E – Introduction to Information Systems – Fall 2017
Quiz 1 Question & Answer Sheet

QUIZ 1

Duration: 40 minutes.
There are 14 questions.
Rules: - Not open-book. No extra notes or papers are allowed.
- Cellphones must be put away. Calculators are not allowed.

1.

I used Geany to create an HTML web page and I saved it as a file called *page.jpg*. What is most likely to happen when I open the file from my file manager?

2.

I receive an email from a friend and in it is written text like the following:

Bir ıŞık düŞerse üstüne basma.

What is most likely to have happened here?

- **A** My friend wrote something on Linux but it is being viewed on Windows.
- **B** My friend wrote something on Windows but it is being viewed on Linux.
- **C** My friend wrote the text with HTML character references but I am viewing it as plain text.
- **D** My friend wrote the text in plain text but I am viewing it as HTML with character references.
- **E** My friend wrote something in Windows-1251 but I am viewing it as UTF-8.
- **F** My friend wrote something in UTF-8 but I am viewing it as Windows-1251.
- **G** There was some corruption of data in memory.
- **H** There was some corruption of data on disk.

3.

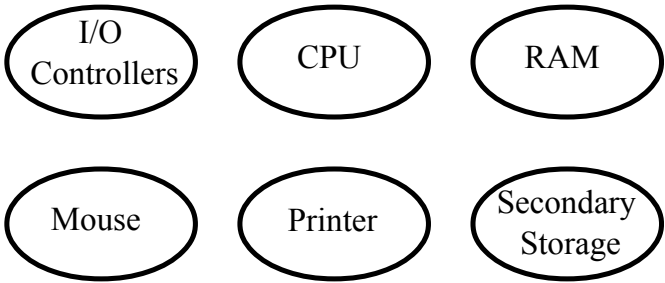Please expand the following acronyms:

CSS:_____

CPU:_____

HTML:_____

RAM:_____

CMYK:_____

4.

Please complete the unfinished diagram of part of a computer architecture below to connect the parts by drawing connecting lines representing the system bus or similar connection and any extension buses, labelling each.

I/O Controllers   CPU   RAM

Mouse   Printer   Secondary Storage

5.

For each below data-storage purpose, please write the name and mime-type of a file type appropriate for that purpose. The first is partially done.

Purpose	File type	MIME type	Extension
Content of web pages	HTML		.html or .htm
Photos for sharing			
Image for editing with GIMP			
Vector graphics			
An uncompressed archive			
A compressed archive of files			
A LibreOffice Calc spreadsheet			

6.

In the following example spreadsheet, please write into the bottom left blank cell a formula to calculate the average of the numbers above it, without using range functions. In the blank cell on the bottom right write a formula to calculate the average of the numbers above it, using a range function. Write the formulae as you would need to write them into LibreOffice Calc.

7	16
35	26

7.

Please write down the smallest segment of HTML code that you can think of that would validate as HTML 5.

8.

Using Git, in order to store a change fixing a syntax problem with file *page.html* and share it on GitHub I would need to do which of the following operations in which order? Put 1,2, 3 and 4 in the boxes next to the operations, with 1 being the first and 4 being the last.

☐ `git add page.html`   ☐ Click "choose your files".

☐ Click "Upload Files"   ☐ `git merge page.html`

☐ `git push`   ☐ `git commit -m "Bugfix: fix HTML syntax"`

☐ `git pull`   ☐ Enter commit message.

☐ Select *page.html.*   ☐ Right click on the file.

☐ `git push page.html`   ☐ Click "Commit changes".

9.

Please complete the following table by converting the format of the numbers in the empty cells:

Hexadecimal	Binary	Decimal
0x11		
	0b11001100	
		11
0x2A		

10.

Please match the words on the left to the definitions on the right.

Node •   • A curve defined by a set of nodes or control points.
Brush •   • The color or pattern enclosed by a shape or path.
Align •   • A set of pixels or image primitives that are active and ready to be manipulated.
Fill •   • The smallest spatial unit of a raster image
Distribute •   • Force image objects to arrange themselves according to a regular pattern in the image.
Pixel •   • Force image objects to coordinate their locations along a consistent axis in the image.
Current Selection • • A way of selecting pixels using a curve defined by the movement of the mouse.
Free Select •   • A small image used for painting (or the way it is applied the image).
Path •   • The fundamental element of a path.

11.

In the following, circle functions that are performed by operating systems. You can circle multiple options.

Arranging input voltage.   Converting source code into machine code.   Providing an interface to basic software operations.

Arranging interactions between programs.   Providing an interface to hardware.   Starting programs.

12.

Please draw lines between the concepts on the right and all examples of those concepts on the left (examples may match multiple or no concepts).

CMYK •	• Red green and blue.
RGB •	• Additive color.
Brightness •	• Subtractive color.
Contrast •	• Printer ink.

13.

Read the following CSS and answer the questions that follow assuming the CSS is linked into an HTML file:

```
p.conclusion {
    color: #ff0000;
}
p {
    font-family: "Courier New", Courier, monospace;
}
.understated {
    font-size: 0.75em;
}
```

How will HTML elements like `<p>Text</p>` be displayed?

How will HTML elements like `<p class="conclusion">Text</p>` be displayed?

How will HTML elements like `<p class="understated">Text</p>` be displayed?

14.

Assuming the path /home/alovelace/Desktop/CV.pdf exists, is a PDF file, and is the only file in its folder, what would be the result of running each of the following three sets of commands?

LS /home/alovelace/Desktop/

cd /home/alovelace/Desktop
geany ../Desktop/CV.pdf

cd /home/alovelace/Desktop/CV.pdf