L-Università ta' Malta

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE
EXAMINATIONS BOARD

**SECONDARY EDUCATION CERTIFICATE LEVEL
2022 MAIN SESSION**

SUBJECT:	**Information Technology**
PAPER NUMBER:	Controlled – Unit 2
DATE:	14th May 2021
TIME:	10:00 a.m. to 11:35 a.m.

THIS PAPER SHOULD BE RETURNED TO THE INVIGILATOR AFTER THE EXAMINATION.

Name of candidate _____

I.D. number _____

School _____

Class _____

Answer **ALL** questions in the space provided.

Scenario

- A new advertising company named T&H Advertising has just opened.
- Since the company is new in the industry, it doesn't have a lot of customers yet.
- The company is thinking of creating different multimedia systems so that it can attract customers.

Question 1   **K-1 (4 marks)**

T&H Advertising is thinking of utilising different multimedia systems to cater for different customers.

a) List **FOUR** different types of media, apart from images and audio.

Media 1: _____   (0.25)

Media 2: _____   (0.25)

Media 3: _____   (0.25)

Media 4: _____   (0.25)

b) Relate each type of media listed in Question 1a with **ONE** of the human senses.

Human sense related to media 1: _____   (0.25)

Human sense related to media 2: _____   (0.25)

Human sense related to media 3: _____   (0.25)

Human sense related to media 4: _____   (0.25)

c) T&H Advertising is considering buying new hardware to cater for different types of media which might be required.

For each type of media listed in Question 1a, identify **ONE** hardware required to either develop or experience the media.

Hardware required for media 1: _____   (0.5)

Hardware required for media 2: _____   (0.5)

Hardware required for media 3: _____   (0.5)

Hardware required for media 4: _____   (0.5)

Question 2   **K-2 (4 marks)**

- T&H Advertising is thinking about increasing the number of images used for their advertising campaign.
- However, employees are not sure which image file type to use since they are not aware of their characteristics.

a) State **TWO** main characteristics of image formats apart from vector/raster, compatibility and compression.

Characteristic 1: _____   (0.5)

Characteristic 2: _____   (0.5)

b) The following screenshot shows some of the properties of an image file named poster.jpg.
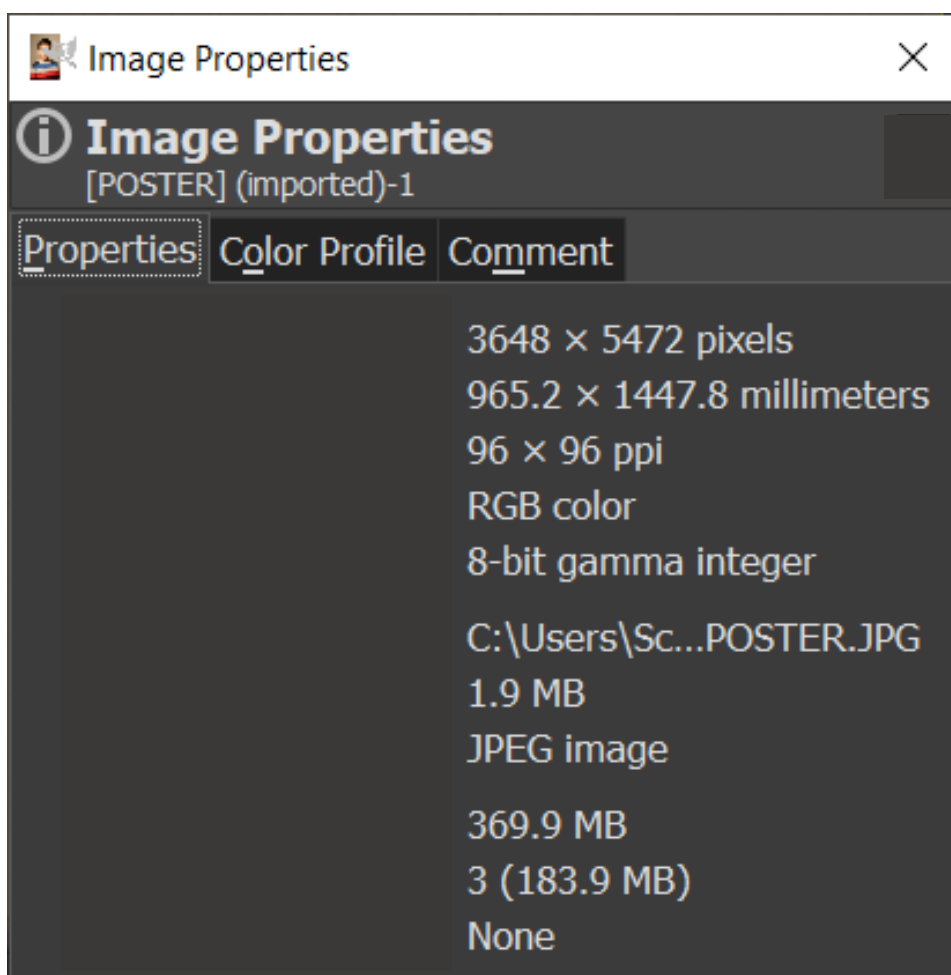
This question continues on next page.

From the given screenshot, identify the value of the **TWO** characteristics, stated in Question 2a, for the poster.jpg image file.

Characteristic 1 for provided image file: _____ (0.5)

Characteristic 2 for provided image file: _____ (0.5)

c) Describe the **TWO** characteristics for the .jpg image file whose values are identified in Question 2b.

Description of Characteristic 1:

_____

_____

_____

_____ (1)

Description of Characteristic 2:

_____

_____

_____

_____ (1)

Question 3   **K-7 (4 marks)**

The management of T&H Advertising decided to develop a website as an additional mode of providing information to clients.

a) List **TWO** basic elements of a website apart from header and navigation menu.

Element 1: _____ (0.5)

Element 2: _____ (0.5)

b) The image below shows the first draft of the website. Identify the **TWO** basic elements listed in Question 3a by drawing a box around these elements in the image below. It is important to write down the name of the element next to its box.   (1)

(Adapted from: https://fruchtman.com)

c) Outline the purpose of the basic elements listed in Question 3a.

Purpose of Element 1: _____

_____

_____ (1)

Purpose of Element 2: _____

_____

_____ (1)

Please turn the page.

Question 4   **C-4 (6 marks)**

- As a business, T&H Advertising intend to use the website to promote their products as well as allow their customers to buy products online.
- It is very important that the website is intuitive and user friendly.
- The management are not sure about which header and navigation menu should they choose for the company's website.
- They looked at different styles and short listed the following headers and navigation menus.

a) Following are the screenshots of two headers and two navigation menus.

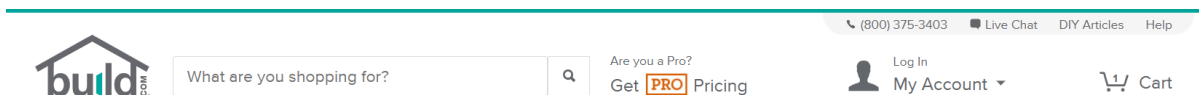Select the appropriate header and navigation menu for T&H Advertising.

Header 1
(Source: https://ometria.com)

Header 2
(Source: https://belvg.com)

Navigation menu 1
(Source: https://www.awwwards.com)

Navigation menu 2
(Source: https://www.awwwards.com)

Header: _____ (1)

Navigation menu: _____ (1)

b) Justify the choice of the header and the navigation menu selected in Question 4a.

Justification of Header: _____

_____

_____

_____

_____

_____ (1)

Justification of Navigation Menu: _____

_____

_____

_____

_____

_____ (1)

c) Considering the purpose of T&H Advertising, argue whether it is better to have a dynamic website or a static website.

_____

_____

_____

_____

_____

_____

_____

_____

_____ (2)

Please turn the page.

Question 5   **K-9 (4 marks)**

The website for T&H Advertising will be developed mainly through the use of HTML.

a) Define HTML and its use.

_____

_____

_____ (1)

b) List **TWO** HTML basic tags and **TWO** HTML element tags which can be used when developing a website.

HTML basic tag 1: _____   (0.25)

HTML basic tag 2: _____   (0.25)

HTML element tag 1: _____   (0.25)

HTML element tag 2: _____   (0.25)

c) Relate the following attributes to their respective HTML tag.

i. target attribute: _____   (0.5)

ii. alt attribute: _____   (0.5)

iii. rel attribute: _____   (0.5)

iv. src attribute: _____   (0.5)

Question 6   **K-10 (4 marks)**

Some of the employees of T&H Advertising suggested the utilisation of CSS together with HTML for a more holistic look to the website.

a) Define CSS and its use.

_____

_____

_____ (1)

b) Some employees suggested using internal CSS, whilst others suggested the use of external CSS.

Distinguish between internal and external CSS.

_____

_____

_____

_____

_____

_____

_____ (1)

c) The following line of code was utilised as part of the CSS style.

```
table {
    border: 2px solid black;
    color: purple;
    width: 100%;
}
```

Outline the use of the following CSS selector and declarations utilised in the code above.

i. table selector: _____

_____

_____ (0.5)

ii. border declaration: _____

_____

_____ (0.5)

iii. color declaration: _____

_____

_____ (0.5)

iv. width declaration: _____

_____

_____ (0.5)

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