Republic of Rwanda
City of Kigali

MARKING GUIDE

TRADES: SOFTWARE DEVELOPMENT

RTQF LEVEL: 3

SUBJECT: GRAPHIC DESIGN BASICS

1. **How does the spot healing brush tool differ from the healing brush tool? (3 marks)**

   the spot healing brush tool automatically samples the area around the blemish and blends it with the surrounding pixels, while the healing brush tool requires the user to manually select the source area to use for the correction.

2. **Differentiate Brand from brand identity (6 marks)**

   - A brand refers to the overall perception or image of a company or product in the minds of consumers, while
   - brand identity is the visual and tangible elements that represent the brand, such as the logo, colors, typography, and other design elements.

3. **What are the blending modes? (3 marks)**

   Blending modes in Adobe software are used to determine how the pixels of one layer interact with the pixels of underlying layers.

4. **Maria is adjusting the vertical space between lines of text. What is she affecting? (3 marks)**

   By adjusting the vertical space between lines of text, Maria is affecting the leading, which is the distance between the baselines of each line of text.

5. **a) What is a workspace in Adobe Illustrator (3 marks)**

   b) List atleast 3 elements found inside Photoshop's interface (3marks)

   a) A workspace in Adobe Illustrator is a customizable layout of panels, tools, and menus that a user can arrange according to their preferences for their specific design needs.

   b) Some of the elements found inside Photoshop's interface include the menu bar, tool bar, layers panel, history panel, and navigator panel.

6. **You need to make a precise selection of a person's arm to separate it from background. Can you describe your process byusing any of the selection tools to achieve that? (5 marks)**

- Pen Tool to create a path around the arm, then convert the path to a selection.
- Another option is to use the Quick Selection Tool or the Magic Wand Tool to make a rough selection, then refine the edges using the Refine Edge Tool or the Select and Mask feature.

7. **List atleast 5 panels in Adobe Illustrator. (5 marks)**
Some of the panels in Adobe Illustrator include the Layers panel, Swatches panel, Appearance panel, Pathfinder panel, and Properties panel.

8. **You have taken a photo with too little light, and you have to adjust the light to make it a bit clear. Discuss 2 ways of doing that in Photoshop. (6 marks)**

Two ways of adjusting the light in a photo in Photoshop include using the

- Levels adjustment tool to adjust the highlights, shadows, and midtones, and
- using the Curves adjustment tool to manually adjust the brightness and contrast of the image.

9. **What is the difference between vibrance and saturation (6marks)**

- vibrance primarily increases the saturation of muted colors without oversaturating already vivid colors, while
- saturation increases the intensity of all colors in the image equally.

10. **What is the difference between Adobe Photoshop and Adobe Illustrator? (6 marks)**

- Adobe Photoshop is primarily used for editing and manipulating raster images, while
- Adobe Illustrator is used for creating and editing vector graphics.

Photoshop is typically used for photo editing, graphic design, and digital painting, while Illustrator is used for creating logos, illustrations, and other vector-based graphics.

11. **Explain the purpose of the toolbar in the Illustrator's interface (3 marks)**

The toolbar in Illustrator's interface contains various tools for creating and manipulating shapes, lines, and other elements in a design. These tools include the Selection Tool, Direct Selection Tool, Type Tool, Pen Tool, and various Shape Tools.

12. **What are the different preferences that can be set in Photoshop? List 3 (3 marks**

Some of the preferences that can be set in Photoshop include general preferences such as file handling and performance, interface preferences such as color and font settings, and tool-specific preferences such as brush settings and selection options.

SECTION B Answer 3 questions 30 Marks

13. **A web designer named Arsene Hirwa is creating a small design that will be used on his website. a) Which color mode would you advise him to use? Justify your answer with two reasons. (6 marks) b) Which resolution would you recommend? (4 marks**

a) For a small design that will be used on a website, it is advisable to use RGB color mode. The reasons for this are:

- RGB color mode is suitable for digital media such as websites since it uses a color model based on light, which is how screens display colors.

- RGB color mode has a wider range of colors than CMYK, which makes it more suitable for digital designs.

b) The recommended resolution for web design is 72 pixels per inch (ppi). This resolution is optimized for screen display and allows for faster loading of web images.

14. **a) Katusiime have designed a logo in Illustrator, and she need to export it as a PNG file with a transparent background to use on a website. How should she save it? (5 marks)**

b) Germain is designing an infographic in Illustrator, and he's required to save it as a SVG file . Which options should you choose in the Export dialog box to ensure that the file is compatible with most browsers and the graphics are scalable? (5 marks)

a) To save the Illustrator logo as a PNG file with a transparent background, Katusiime should follow these steps:

- Select the logo.

- Click on File > Export > Export As.

- Choose PNG as the file format.

- Select "Use Artboards" option.

- Check the "Transparent" option under the "Background Color" settings.

- Click on "Export" to save the file.

b) To save the Illustrator infographic as an SVG file that is compatible with most browsers and scalable, Germain should choose the following options in the Export dialog box:

- Choose SVG as the file format.

- Under "SVG Options", select "SVG 1.1" as the standard.

- Check the "Preserve Illustrator Editing Capabilities" option to ensure that the file can be edited in the future.

- Check the "Responsive" option to make the graphics scalable.

- Click on "Export" to save the file.

15.   You have been hired to edit wedding pictures, yet some, appears more yellowish. By using 2 Adjustment layers, how can you balance out the yellows and bring them back to their natural state? (10 marks)

To balance out the yellows and bring the wedding pictures back to their natural state, two adjustment layers that can be used are:

- Curves adjustment layer: This allows for precise adjustments of the color and tone of the image. To reduce the yellows,

select the Blue channel and move the curve downwards to add blue to the image and reduce the yellows.

- Color Balance adjustment layer: This allows for adjustments of the colors in the shadows, midtones, and highlights. To reduce the yellows, move the slider towards the opposite color on the color wheel, such as blue or green.

16. Ngabonziza has a flyer that He needs need to send to a client, but it is too big to send to an email. He need to decrease the size while still maintaining the best possible quality.

a) What is the difference between lossy and lossless optimization (compression) of files? (6 marks)

b) List 2 file format that uses the lossless compression (4 marks)

a) The difference between lossy and lossless optimization of files is:

- Lossy compression reduces the file size by permanently discarding some data, which can result in a loss of quality. This compression method is suitable for images that do not require high detail or for images that will be displayed on the web.

- Lossless compression reduces the file size without any loss of quality by compressing the data in a way that it can be restored exactly as it was before compression. This method is suitable for images that require high detail or for images that will be printed.

b) Two file formats that use lossless compression are:

- PNG: This file format supports transparency and lossless compression. It is suitable for web graphics that require high-quality images with transparent backgrounds.

- GIF: This file format supports animation and lossless compression. It is suitable for simple graphics and animations that require a small file size.

20. Five tools available in Adobe Illustrator and their uses are:

- Selection tool: Used to select and move objects on the artboard.

- Pen tool: Used to create precise paths and shapes.

- Type tool: Used to add and edit text on the artboard.

- Gradient tool: Used to apply and adjust gradients to objects.

- Shape builder tool: Used to combine and subtract shapes to create complex shapes.

21. a) Differentiate Font from typeface (4 marks):

A typeface refers to a specific style or design of characters, such as Times New Roman or Arial, while font refers to the digital file that contains the typeface in a specific size and weight. In other words, a typeface is a collection of characters with a common design, while a font is a specific variation of that typeface in a specific size, weight, and style.

b) In 3 ways, How would you ensure that the typography in the brochure is legible and easy to read? (6 marks):

1. Choose a legible font: Select a font that is easy to read and matches the tone and style of the brochure. Avoid using fonts that are too decorative or complicated, as they can make the text difficult to read.

2. Use appropriate font size: Make sure that the font size is appropriate for the size of the brochure and the amount of text. Text that is too small or too large can be difficult to read.

3. Use appropriate line spacing: Adjust the line spacing to make the text more readable. A too-tight line spacing can make the text difficult to read, while a too-loose line spacing can make the text hard to follow.

c) After designing your brochure you will need to make a realistic mockup. Distort and perspective are two transform controls that can be used. Clearly differentiate them. (5 marks):

Distort is a transform control that allows you to stretch, skew, or warp an object in any direction. This can be useful for creating a more realistic perspective effect or for adjusting the shape of an object.

Perspective is a transform control that allows you to adjust the perspective of an object as if it is being viewed from a specific angle. This can be useful for creating a 3D effect or for adjusting the position of objects in a scene. With perspective, you can adjust the height, width, and depth of an object, giving it a more realistic appearance.