061006T4ICT

ICT TECHNICIAN LEVEL 6

ICT/OS/IT/CR/09/6

PERFORM GRAPHIC DESIGN

July/August 2024

TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE:

1. The paper consists of two sections: **A** and **B**
2. Answer **ALL** questions in Section **A** and any **Three** from section **B**
3. Marks for each question are indicated in the brackets
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in this question paper

This paper consists of THREE (3) printed pages.

Candidate should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A (40 Marks)

Answer ALL the questions in this section

1. Jackson was learning about computer graphics in his introductory class and came across the following two terminologies. Define the terminologies.

   i. Persistence   (2 Marks)

   ii. Computer Graphics   (2 Marks)

2. Erick realized that most graphic designers preferred using vector graphics. Explain ONE advantage of using this kind of graphics over other graphics.   (2 Marks)

3. While collecting client specification, Selina realized that she had to use bitmaps for her project. Outline THREE reasons for her choice.   (4 Marks)

4. Laser printers are commonly used to publish graphic designs. List FOUR advantages of using this type of printer over other printers   (4 Marks)

5. Graphic design requires both software and hardware components. List TWO components required in;

   i. Software   (2 Marks)

   ii. Hardware   (2 Marks)

6. Dominance and priority are key principles in graphics that help create effective and visually appealing compositions. Define the TWO principle as used in computer graphics. (4 Marks)

7. In graphic design, superscript and subscript are types of typographical elements used to adjust the positioning of text characters relative to the baseline. Differentiate between the two elements.   (4 Marks)

8. Access time per pixel is the time it takes for a system to retrieve and display single pixel on the screen. Differentiate between high access time and low access time.   (4 Marks)

9. Pulin a graphic design student at Oldonyo technical wanted to design a wedding card for his friend. Outline THREE graphic design tools which would help him to accomplish this task.   (3 Marks)

10. During a practical exercise, Clinton was tasked with removing an image background using adobe Photoshop. Outline the procedures on how he would accomplish the task.

                                                                                                            (4 Marks)

11. Outline THREE types of printing techniques used in graphic design   (3 Marks)

SECTION B (60 Marks)

*Answer **any THREE** questions in this section*

12. a) Graphic design techniques involves a range of practices that help designers craft appealing, pleasing, effective and communicative designs. Discuss FOUR such techniques   (12Marks)

   b) Computer graphics have a wide range of application areas across various fields. Explain THREE such areas of application other than entertainment.   (6 Marks)

   c) Graphic display devices are used to visually present images, graphics, and video to the user and explaining its components. Outline TWO components of such devices.

(2 Marks)

13. a) Pipelining process involves a systematic workflow that ensures efficient creation, manipulation and finalization of visual content. With the aid of a suitable diagram, illustrate the pipelining process structure in graphic design.   (10 Marks)

   b) Page layout details the basic design of the element of a page. Describe THREE types of layouts available in CorelDraw   (6 Marks)

   c) Dynamic graphics, an upcoming graphics design company has hired you to develop a logo for them. List FOUR features you are likely to use in the logo.   (4 Marks)

14. a) While saving her publication, Wakesho realized that there were several file extensions formats she could use. Explain FOUR different kinds of file extensions that she noticed

(8 Marks)

   b) Shapes are used to convey motions and dynamism effects in logo designs. Explain THREE types of shapes which you can use for this effect.   (6 Marks)

   c) Differentiate between pillar boxing and letterboxing.   (4 Marks)

   d) Define the term Aspect Ratio as used in graphical design.   (2 Marks)

15. a) In graphic design, transformation of objects and images involves the process of altering the position, orientation, size or shape of an object in a 2D or 3D space. Explain FIVE types of transformation available.   (10 Marks)

   b) Typography standards adapt to different mediums such as a print and digital platform based on unique characteristics and requirements. Discuss how these requirement adapts to typography standards.   .   (10 Marks)

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