Unity University

Faculty of Engineering and Technology

Department of Computer Science

Computer Graphics Assignment

General Instruction: Form a group of Five students and prepare a well formatted document on the given topics.

Follow the following document formatting while preparing the assignment

i.   **Bind**

ii.   **Cover page which contains**

      a. **Logo of the University**

      b. **College and Department**

      c. **List of group members**

      d. **Submitted to**

      e. **Date**

      f. **Page border**

iii.   **Main Title**

      a. **Font size : 14pt**

      b. **Font name : Times New Roman**

      c. **Font style : Bold**

iv.   **Sub Title**

      a. **Font size : 13pt**

      b. **Font name : Times New Roman**

      c. **Font style : Bold**

v.   **Body Text**

      a. **Font size : 12pt**

      b. **Font name : Times New Roman**

      c. **Font style : Regular**

      d. **Paragraph alignment : justified**

      e. **Paragraph line spacing : 1.5**

      f. **Support your document with colored picture**

Questions

1. Write brief history of computer graphics (CG).

2. Discuss advantages of computer graphics

3. Discuss advantages of computer graphics

4. List down and briefly explain about the application areas of computer graphics.

5. What is the difference between the following display devices (monitors)? How each device works?

   a. CRT   b. LCD   c. LED   d. PLASMA

6. Flat-panel display could be classified as emissive and non-emissive. Discuss the difference between the two and give examples for each.

7. Discuss about the RGB color model and the YIQ color model

8. How images are represented and processed inside the computer

9. What is transformation in computer graphics? Discuss about the five common transformation

10. What is homogeneous matrix? Discuss its use in transformation.

11. Discuss about the following:
    a. Animation
    b. Simulation
    c. Image processing
    d. Virtual reality

Note: while discussing question number include the following points:

- Definition
- Advantages
- Application areas

Disadvantage (if any)