

**Mid-West University**  
**Examinations Management Office**  
**Final Examinations -2081**

Level: Bachelor /B.Sc. CSIT/ Semester: IV

F.M: 60

Time: 3hrs.

P.M: 30

Subject: Computer Graphics (COM444)

*Candidates are required to give their answers in their own words as far as practicable. Figures in the margins indicate marks.*

**Group A**

**Very Short Answer Questions (Attempt ALL)**

**[8 x 2 = 16]**

1. Discuss Graphical Languages.
2. Write short notes on Joy Stick and Graphics Tablet.
3. How can you define Aspect Ratio?
4. Write any two advantages of recent transform.
5. Define Graphics File Format. For what purpose is JPEG used?
6. What do you mean by Differential Scaling?
7. Define Visible Surface Detection.
8. Write any four advantages of Computer Graphics?

**Group B**

**Short Answer Questions (Attempt ANY FIVE)**

**[5 x 4 = 20]**

9. Explain Bresenham's Line Drawing Algorithm.
10. What do you mean by two-dimensional transformation? Explain 3D Translation.
11. Describe Polygon Meshes. illustrate its advantages.

12. Translate the given points (2,5) by the translating value (3,3).
13. Explain Gouraud Shading.
14. Explain Cathode Ray Tube (CRT) with appropriate diagram.

**Group C**

**Long Answer Questions (Attempt ANY THREE) [3 x 8 = 24]**

15. Explain Digital Differential Analyzer Line Drawing Algorithm (DDA). Digitize the line with endpoints (1,5), and (7,2).
16. Explain Plane Equation Method in Visible Surface Detection.
17. Describe Raster Scan and Vector Scan Display with appropriate Diagram.
18. Explain project planning and developing a project in computer graphics.

**THE END**