Punjab Technical University
Master of Computer Application Examination

MCA 5th Semester COMPUTER GRAPHICS 2006

Time: Three hours maximum: 100marks

PART A Answer all questions (8x5=40 marks)

1. (a) Write short notes on Graphical User Interface. Or (b). Write an algorithm for line drawing and line commands.

2. (a) Write a note on bundled attributes. Or (b). What are the transformation commands?

3. (a). Write short note on window-to-view port. Or (b). Explain the following: I) Segment attributes. II) Segment files.

4. (a) Write a note on construction technique. Or (b). Give an account on input functions.

5. (a) Write short notes on 3D- Graphics packages are used in Animation. Or Write short notes on 3D-coordinate system.

6. (a)What does scaling mean? Give an example. Or (b) List out the various transformation of 3D images.

7. (a). Write short notes on Back face removal. Or (b) Write short notes on viewing transformation.

8. (a). Define Projection. Or (b) Write an algorithm for scan line method.

PART B Answer all questions (5*12=60 marks)

9. (a) Write short notes on the following: I) Display processors II) Circle-generation algorithm. Or (b). Explain the images processing display devices.

10. (a). Write short notes on Composite transformation and transformation commands. Or Write short notes on matrix representation and homogeneous coordinates.

11. (a) Write short notes on workstation. Or (b) explain the line-clipping algorithm in detail.

12. (a). Write short notes on 3D-Translation, rotation in detail. Or (b). Write short notes on 3D-Display technique.

13. (a). Write short notes on the following: I) Hidden surface. II) Hidden-line removal. Or (b) Write short notes on the implementation of viewing operations and various projections.