

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.SC) IN COMPUTER APPLICATIONS
EXAMINATION : DECEMBER-2022
SEMESTER - I

Sub.: Computer Graphics and Multimedia (MSC– 102-19)

Date : 21/12/2022

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2-3 lines. (Any 5) (10)

1. What is line clipping?
2. What is aliasing?
3. Give graphic primitives for ellipse.
4. What is the importance of using frame buffer?
5. Define: a. Resolution b. Aspect Ratio.
6. Give application of computer graphics.
7. Give uses of multimedia?

Q. 2. Answer the following in short. (Any 4) (20)

1. What are various methods of character generation? Explain any one method.
2. Explain 2D transformation for reflection and shearing transformation.
3. Explain the Z-buffer.
4. Write short note on Bezier curve.
5. What is segment? Explain a segment table and a deletion operation.
6. Explain what is viewing transformation with example.

Q. 3. Answer the following in detail. (Any 3) (30)

1. Write a short note on polygon filling.
2. Describe the bresenham's algorithm for line drawing.
3. Explain cohen-Sutherland subdivision line clipping algorithm.
4. Explain in detail random scan display and raster scan display
5. Write a short note on fractal surfaces.