

Roll No

CS-504 (GS)
B.E. V Semester Examination, June 2020
Grading System (GS)
Computer Graphics and Multimedia
Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. What are the steps required to plot a line whose slope is between 45° and 90° using Bresenham's method?
2. In YIO Color model one of the three stores luminance. What is the use of YIO standard any why having a luminance channel is useful?
3. Explain the following with the reference of 2D transformations:
 - i) Translation
 - ii) Scaling
 - iii) Rotation
4. Define the term Aspect ratio and Resolution? What is the ratio of a 1024×1024 frame buffer with an average access rate per pixel of 200 nanosecond on a simple color display?
5. Explain midpoint circle drawing algorithm. Draw a circle of radius six units about origin with the help of this algorithm.
6. Describe the transformation that rotates an object point $Q(x, y)$, θ° about a fixed centre of rotation $P(h, k)$.
7. Discuss the main difference of MPEG-1 video standard from H.261 with illustrative diagram. How is the MPEG-1 video file structured?

OR

What is CRT? Explain the operation of CRT with the help of diagram.

8. Write a short notes (any two):

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| a) Video File Formats | b) Multimedia databases |
| c) Shading | d) Text File Formats |
| e) Clipping | |
