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| ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27 |
| B.C.A - IV SEMESTER |
| SEMESTER EXAMINATION: APRIL 2019 |
| CA 4115- Computer Graphics |
|  |  |  |  |  |  |
| Time- 3 hrs |  | Max Marks-70 |
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|  This paper contains two printed pages and three partsPart AAnswer all of the following (2\*10=20)1. Define graphics? Mention any two applications of graphics?
2. What is a display processor?
3. What do you mean by persistence and aspect ratio?
4. Define any two attribute of a line ?
5. What is transformation?
6. What are homogenous coordinate?
7. Explain clipping.
8. What is RGB color model?
9. What do you mean back face removal?
10. Explain octrees.

Part BAnswer any five of the following (6\*5=30)1. Explain any two interactive input device in detail.
2. Write down Bresenham’s line drawing algorithm.
3. Explain translation along with its equation and matrix representation.
4. Explain window to viewport coordinate transformation.
5. Compare and contrast between parallel and perspective projections.
6. Define vanishing points? Is the location of vanishing point directly related to the given point? Explain.
7. Explain the following
8. Graphics tablet
9. Light pens
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Part C

Answer any two of the following (10\*2=20)

1. Explain Bresenham’s Circle drawing algorithm.
2. Explain Cohen Sutherland line clipping algorithm.
3. Explain the design and working of CRT