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| DATE: **10** **-04-2018**  **col LOGO outline**  **ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**  **BCA : IV SEMESTER**  **SEMESTER EXAMINATION: APRIL 2018**  **CA 4115 : Computer Graphics**  (For supplementary candidates of 14 & 15 batches only)  Do not write the register number on the question paper  Please attach the question paper along with the answer script.  Time : 2 1/2 hrs Max marks :70  *This question paper has one printed page*  **I Answer all the questions 2\*10= 20**  1. Write down any four application area of computer graphics.  2. What are line attributes?  3. What is DDA ? List down its advantages and disadvantages.  4. What are homogenous Co-ordinates?  5. What is clipping? Mention any three types of clipping.  6.What is composite transformation?  7.What is parallel projection?  8. Explain octrees.  9.What is object space method?  10.Mention the two Color Models.  **II.Answer any FIVE of the following. 5\*6= 30**  11.What are hard copy devices? Explain any one.  12.Describe about random scan display system.  13. Explain Bresenham’s Line drawing Algorithm.  14. Explain Window-to-Viewport Transformation in detail.  15. Explain any two physical input devices in detail.  16. Explain scaling and translation with respect to 3D objects.  17.Describe in detail about the depth buffer method to detect visible surfaces.  **III Answer any TWO of the following. 2\*10=20**  18.Describe about Bresenham's circle drawing algorithm.  19.What do you mean by 2D transformation? Mention the different types of transformations. Explain any two types of transformation along with its relevant transformation equation and matrix.  20. Explain Cohen-Sutherland Line clipping algorithm in detail. | | | | | |
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