BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)

CLASS: BE   SEMESTER: VI
BRANCH: CSE   SESSION : SP/2019

SUBJECT : CS6011 COMPUTER GRAPHICS AND MULTIMEDIA

TIME: 1.5 HOURS   FULL MARKS: 25

INSTRUCTIONS:
1. The total marks of the questions are 30.
2. Candidates may attempt for all 30 marks.
3. In those cases where the marks obtained exceed 25 marks, the excess will be ignored.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. The missing data, if any, may be assumed suitably.

Q1 (a) What is frame buffer? How it helps in Computer Graphics?   [2]
    (b) Explain calligraphic refresh display.   [3]

Q2 (a) Describe about direct storage tubes in CG.   [2]
    (b) Discuss the role of CG in education and training.   [3]

Q3 (a) Write a second-degree equation which describe a conic section. Write the particular [2]
         conic generated by its discriminant.
    (b) Write the procedure to scan convert the line whose slope is between 45^0 and 90^0. [3]

Q4 (a) What is odd even rule? Explain with examples.   [2]
    (b) Write the mid-point circle generating algorithm.   [3]

Q5 (a) List the importance of homogeneous coordinate on CG transformations.   [2]
    (b) Prove that when two points are translated then the entire line is translated. [3]

Q6 (a) Write the significance of World coordinate system in CG.   [2]
    (b) Write the Liang Barsky line clipping algorithm. Explain with examples.   [3]

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