Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

BCA (2013 & Onward) (Sem.–6) COMPUTER GRAPHICS Subject Code : BSBC-602 Paper ID : [A2378]

Time: 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

SECTION-A

1. Answer briefly :

- a) What are the applications of Line drawing algorithms?
- b) What is Beam Penetration method best suited for?
- c) What do you mean by Active and Passive Graphics?
- d) What do you mean by Polygon clipping?
- e) Write in brief about the working of Trackballs.
- f) What are the specifications of the any Flat-panel display used now-a-days?
- g) What do you mean by Scaling transformation? Write the matrix notation also.
- h) Write the transformation matrix for 2-D Reflection about y-axis.
- i) Write any two applications of Random scan systems.
- j) What do you mean by Cartesian and Homogenous coordinates?

SECTION-B

- 2. What are the various 2-D geometric transformations? Explain with the help of examples.
- 3. Write a note on Projections. What are the different types of Projection in computer graphics? What are those used for?
- 4. What are the various Display devices used in Computer graphics? Give the advantages and disadvantages of each of them.
- 5. What are the various Scan conversion algorithms for Line and Ellipse drawing? Write the steps in detail along with an example.
- 6. Write in detail about Area Filling techniques. How is it extended for Text/Character generation?
- 7. What do you mean by View Volume? Write an algorithm for 3-D Line and polygon Clipping. What is its use in computer graphics?