



C09-IT-606A

**3778**

**BOARD DIPLOMA EXAMINATION, (C-09)**

**OCT/NOV—2013**

**DIT—SIXTH SEMESTER EXAMINATION**

**COMPUTER GRAPHICS**

*Time : 3 hours ]*

*[ Total Marks : 80*

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**PART—A**

**Instructions** : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answer should be brief and straight to the point and shall not exceed *five* simple sentences.

1. Write about the normalized device coordinates and normalized screen coordinates.

2. Write about polygon inside test.

3. Write about scaling transformations on SIN and COS.

4. What is meant by inverse transformation?

5. Define segment table and various parts of a segment table.

6. Write the procedure for renaming a segment.

7. What are meant by windowing and clipping?

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8. Explain about multiple windowing.
9. Explain about 3-D primitives.
10. List various hardware devices used in the interaction.

**PART—B**

**Instructions** : (1) Answer *any five* questions.  
(2) Each question carries **ten** marks.  
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain Bresenham's algorithm with an example.
12. Explain how to fill polygon and list out various applications of polygon.
13. Explain homogeneous coordinates and translation.
14. Explain about other display file structures.
15. Explain Cohen-Sutherland out code algorithm.
16. (a) Explain about viewing transformation.  
(b) Explain adding clipping to the system.
17. Explain the rotation about an arbitrary axis.
18. (a) Explain about parallel projection.  
(b) Explain about 3-D geometry.

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