C09-IT-**606A**

3778

BOARD DIPLOMA EXAMINATION, (C–09)
OCT/NOV—2016
DIT—SIXTH SEMESTER EXAMINATION

COMPUTER GRAPHICS

Time : 3 hours]   [*Total Marks* : 80

PART—A   3×10=30

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

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

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

1. Explain display devices.

2. Explain an inside test.

3. Explain scaling transformations on SIN and COS.

4. Explain homogenous coordinates.

5. Explain segment table.

6. Explain visibility.

7. Define clipping.

8. Explain multiple windowing.

9. Explain about 3D primitives.

10. Explain about parallel projections.

PART—B 10×5=50

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.

12. *(a)* Explain simple DDA. 5

(b) Explain how to fill polygons. 5

13. Explain shear transformations.

14. Explain how to create, close and delete a segment.

15. Explain the Cohen-Sutherland out code algorithm.

16. Explain the Sutherland-Hodgman algorithm.

17. Explain rotation about an arbitrary axis.

18. Explain 3D transformations.

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