



C14-IT-602

4755

BOARD DIPLOMA EXAMINATION, (C-14)

OCT/NOV—2018

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. What are normalized device coordinates?
2. Define polygon.
3. What is meant by translation?
4. What is display procedure?
5. What is a segment?
6. What are the advantages of paging scheme?
7. What is viewing transformation?

- * 8. What is multiple windowing?
9. Define interaction.
10. What is meant by parallel projection?

PART—B

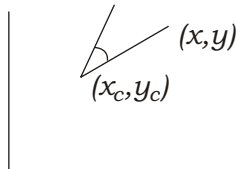
10×5=50

Instructions : (1) Answer *any five* questions.

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

(3) The answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain briefly about Bresenham's algorithm.
12. Explain the following:
- (a) Raster display system
 - (b) Vector refresh display system
13. Determine transformation matrix for counter-clockwise rotation of a line by an angle about a point (x_c, y_c) .



- * 14. Explain briefly about various display file structures.
15. Explain briefly about Sutherland-Hodgman algorithm.

* **16.** Explain briefly how to clip polygons.

17. Explain briefly rotation about an arbitrary axis in 3D.

18. Explain the following :

(a) Joystick

(b) Tablet

(c) Mouse

(d) Light pen

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