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BOARD DIPLOMA EXAMINATION, (C–09)

MARCH/APRIL—2014

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. Write about graphics primitive operations.

2. List the applications of polygon.

3. Define transformation.

4. Write about shear and inverse transformation.

5. Write about various segments available in a segment table.

6. Write the procedure for renaming a segment.

7. Define windowing and clipping.

8. Write about multiple windowing.

9. List the hardware devices used in the interaction.

10. Write briefly about parallel projection.

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 with an example.

12. Define polygon and explain how to fill polygons with algorithm.

13. Explain the rotation about an arbitrary point.

14. *(a)* Explain closing a segment algorithm.

(b) Explain deleting a segment algorithm.

15. Explain viewing transformation implementation.

16. Explain Sutherland–Hodgman algorithm.

17. Explain 3D transformation.

18. *(a)* Explain interaction 3D geometry.

(b) Explain 3D primitives.

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