

**4755**  
**BOARD DIPLOMA EXAMINATION, (C-14)**  
**JUNE-2019**  
**DIT - SIXTH SEMESTER EXAMINATION**  
**COMPUTER GRAPHICS**

Time: 3 Hours ] \_\_\_\_\_ [Max. Marks : 80

**PART -A**

**10X3=30M**

**Instructions:** 1) Answer **all** the questions. Each question carries **three** marks.  
2) Answers should be brief and straight to the point and shall not exceed five simple sentences.

- 1) List various display devices.
- 2) What is display file interpreter?
- 3) Write the steps involved in rotation about an arbitrary point.
- 4) Write about shear transformation.
- 5) What is the need for segment?
- 6) What are the advantages and disadvantages of using array structure as display file structure?
- 7) What is viewport?
- 8) How to add a clipping to the system?
- 9) Draw Right- handed and Left-handed coordinate system in 3D.
- 10) What are the primitive operations in 3D graphics system?

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## PART-B

**5X10=50M**

- 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 answer.

- 11) Explain even-odd method with an example. (10M)
- 12) Explain the following: (a) Raster display system (5M)  
(b) Direct view storage system. (5m)
- 13) Obtain general matrix form for rotational transformation. (10M)
- 14) Explain briefly about creating a segment table. (10M)
- 15) Explain briefly about cohen-sutherland outcode algorithm. (10M)
- 16) Obtain general matrix form for viewing transformation. (10M)
- 17) Explain about parallel projection. (10M)
- 18) Obtain homogenous coordinate matrix for Translation in 3D. (10M)

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