# 4755

# BOARD DIPLOMA EXAMINATION, (C-14) MARCH /APRIL-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?

## **PART-B**

## 5X10=50M

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

- 2) Each question carries ten marks.
- 3) Answers should be comprehensive and the critertion for valuation is the content but not the length of answer.

| 11) Explain even-odd method with an example.                   | (10M) |
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| 12) Explain the following: (a) Raster display system           | (5M)  |
| (b) Direct view storage system.                                | (5m)  |
| 13) Obtain general matrix from 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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