

**B.SC. (A & G) SEM. – IV (OLD COURSE) (ANIMATION &
GAMING) : WINTER - 2017**
SUBJECT : ADVANCED GRAPHICS PROGRAMMING
(DIRECT X / DIRECT SHOW)

Day : **Wednesday**
Date : **27/12/2017**

W-2017-0905

Time : **02.30 pm to 04.30 pm**
Max. Marks : 40

N. B. :

- 1) Attempt **ANY FIVE** questions out of **SEVEN**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labelled diagram **WHEREVER** necessary.

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- Q. 1** List and explain the various components of Microsoft DirectX framework for 2D/3D graphics multimedia applications development. **(08)**
- Q. 2** Compare Any Four features of Direct3D versus OpenGL libraries. **(08)**
- Q. 3** Describe the steps for creating a DirectX application with a rectangle in 3D perspective. Also sketch the output. **(08)**
- Q. 4** With the help of a diagram of 3D Orthographic projection system, clearly indicate and explain the following terms : **(08)**
Camera, Frustum, Viewport, Axes.
- Q. 5** Explain the steps for initialization of Direct3D. Also explain the following terms – DXGI, D3Device. **(08)**
- Q. 6** Explain the various types of lighting available in Direct3D for developing 3D graphics / game application. **(08)**
- Q. 7** Write Short Notes on : **(08)**
- a) Rendering Pipeline in Direct3D
 - b) Primitives in Direct3D

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