

**T.Y.B.C.A. Examination**  
**Computer Graphics Using C++(302)**  
**March/April- 2016**

**Time 3.00 Hrs**

CODE-26614

**100 Marks**

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- Q-1 Attempt the following Questions [20]  
a) Write a short note on Computer Aided Design.  
b) Explain data visualization.  
c) Explain the application of computer graphics in area of entertainment.  
d) Explain the application of computer graphics in the area of Image Processing.  
e) Differentiate between Image Processing and Image Enhancement.
- OR**
- Q-1 Attempt the following Questions [20]  
a) Define Computer Graphics and list various applications area of computer graphics.  
b) List and explain various advantages of using computer graphics software packages.  
c) List latest software packages used to develop graphical application for DTP.  
d) Define Graphical Standard. Explain various computer graphic software standards.  
e) Explain the application of computer graphics in area of education.
- Q-2 Attempt the following Questions [20]  
a) Write a short note on CRT with diagram.  
b) Differentiate between Random Scan and Raster scan display.  
c) Explain in detail: Color CRT Monitor.  
d) List various type of printer and explain laser printer in detail.  
e) Write a short note on Keyboard.
- OR**
- Q-2 Attempt the following Questions [20]  
a) List various video display devices. Explain Raster Scan display device.  
b) Differentiate between B/W CRT and Color CRT.  
c) Write a short note on direct view storage.  
d) Differentiate between Joystick and Mouse.  
e) Explain track ball and space ball.
- Q-3 Attempt the following Questions [20]  
a) List types of output primitives.  
b) Explain DDA Line drawing algorithm.  
c) Explain four connector fill algorithm.  
d) Explain inside outside test for polygon clipping.  
e) List circle generation algorithm and explain any one with its steps.
- OR**
- Q-3 Attempt the following Questions [20]  
a) List attributes of Circle and line with its methods.  
b) List and explain fill area primitives with example.  
c) List and explain various character generation methods.  
d) Explain eight connector fill algorithm.  
e) Differentiate between 4-connector and 8-connector algorithm.

- Q-4 Attempt the following Questions [20]
- a) Explain Rubber Banding Method.
  - b) Differentiate between Zoom-In and Zoom-out.
  - c) Explain purpose of dragging in computer graphics.
  - d) What do you mean by Panning?
  - e) Differentiate between Panning and dragging.
- OR**
- Q-4 Attempt the following Questions [20]
- a) List types of rubber bending methods.
  - b) Define Zooming. Explain various methods of Zooming.
  - c) Explain how dragging is performed in computer graphics application.
  - d) Differentiate between zooming and rubber banding.
  - e) Explain advantages of using panning utilities in computer graphics.
- Q-5 Attempt the following Questions [20]
- a) Define Translation and Transformation.
  - b) Write a short note on Scaling.
  - c) Define Window clipping and its steps.
  - d) Write a short note on Line clipping.
  - e) Explain windows to view point transformation.
- OR**
- Q-5 Attempt the following Questions [20]
- a) Write a short note on Rotation.
  - b) Explain Matrix Representation in computer graphics.
  - c) Write a short note on Polygon clipping.
  - d) Write a short note on Translation.
  - e) Write a short note on Text Clipping.