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# SA-1898

## Third Year B. C. A. (Sem. VI) Examination

### March / April – 2011

## 601 : Computer Graphics

Time : **3** Hours] [Total Marks : **70**

**Instructions :**

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
**Fillup strictly the details of ☛ signs on your answer book.**

Name of the Examination :

☛ THIRD YEAR B. C. A. (SEM. 6)

Name of the Subject :

☛ 601 : COMPUTER GRAPHICS

☛ Subject Code No. : 1 8 9 8 ☛ Section No. (1, 2,.....) : Nil

Seat No. :

Student's Signature

(2) Marks are indicated to the **right** side of Question.

**1** Answer following : **14**

(a) What is Scaling ?

(b) What is pixel and frame Buffer ?

(c) Name any three file types of Raster Image and Vector Image.

(d) How a point in second quarter can be represented as Cordinte ?

(e) What is transformation ?

(f) What is aspect ratio ?

(g) What is Random Scan display ?

**2** (a) Explain flood fill and scan line algorithms. **7**

**OR**

(a) Discuss Polygon inside test method. **7**

(b) Discuss line geometry and line generation algorithms. **4**

**OR**

(b) Discuss geometry of line generation. **4**

(c) Explain various Computer graphics applications. **3**

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|---|---|---|---|
| **3** | (a) | Discuss DOA algorithm for line generation. | **7** |
| | | **OR** | |
| | (a) | Explain Bresenham algorithm. | **7** |
| | (b) | Discuss the process of Rotating line about origin. | **4** |
| | | **OR** | |
| | (b) | Explain the Concept of fractals. Discuss the features of fractals. | **4** |
| | (c) | Discuss color CRT. | **3** |
| **4** | (a) | How Transformation matrix are scalled and transformed ? | **7** |
| | | **OR** | |
| | (a) | Describe concept of Animation and types of computer Animation. | **7** |
| | (b) | Explain various line styles. | **4** |
| | | **OR** | |
| | (b) | Discuss VEGGEN algorithm. | **4** |
| | (c) | What is Refresh CRT ? | **3** |

**5** Write note on following : (any **two**) **14**

(a) Entertainment Application in computer graphics

(b) Rotation of object about origin.

(c) Polygon Filling Algorithm.

(d) Scaling and Translation of object.