

1125  
P.G. Diploma in Computer Graphics and Animation  
First Semester  
CGA-15: Introduction to Graphics and Animation

Time allowed: 3 Hours

Max. Marks: 80

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- What do you understand by the term aspect ratio?
- What is meant by resolution?
- List two major disadvantage of CRT displays.
- What are non-emissive displays?
- Differentiate between the terms window and viewport.
- What is meant by world coordinates?
- What is meant by Animation?
- What do you mean by the term multimedia?

(8x2)

**UNIT- I**

- II. a) Discuss the application of Computer Graphics in Entertainment and Advertisement  
b) What is Image Processing? What types of operations can be performed on images?  
Discuss.

(8,8)

III. Write notes on the following:-

- Computer Aided Design
- Computer Art

(8,8)

**UNIT- II**

- IV. a) Compare Raster Scan Systems with Random Scan Systems.  
b) Compare CRT based displays with Flat Panel displays.
- V. a) How printers can be classified? Explain the working of any one printer.  
b) How Graphics Software can be classified? Discuss the features of any one Graphics Software.

(8,8)

(8,8)

**UNIT- III**

- VI. Derive two-dimensional matrix formulations for  
a) Pivot point rotation  
b) Fixed point scaling

(8,8)

P.T.O.