

BCA Fifth Semester Examination, Dec-2019

FIRST PAPER

Computer Graphics

Paper Code:- 42501

Time Allowed: Three Hours

Maximum Marks.70

(1) No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

(2) All the parts of one question should be answered at one place in the answer book.

(Attempt all six questions.)

Part I (Question No. 1 & 2) is compulsory & Part II (Question No. 3, 4, 5 & 6) has internal choice.

Part-I

1. Answer any 10 questions. Each question carries 1 mark.

10x1= 10

(Words limit up to 20 words each)

- a) How you define the term 'Computer Graphics'?
- b) What is Resolution?
- c) What do you understand by the term 'Pix Map'?
- d) Enlist various types of Clipping.
- e) Define Pixel.
- f) What is Frame Buffer?
- g) Where is the Video Controller used?
- h) Discuss 'Convolution'.
- i) What is Transformation?
- j) Discuss the term 'Translation'.
- k) What is Rotation?
- l) Discuss the term 'Scaling'.

2. Answer all the questions. Each question carries 5 marks.

4x5 = 20

(Words limit up to 50 words each)

- a) Write the important applications of Computer Graphic.
- b) Differentiate Plasma Panel Display and Thin Film Electroluminescent Display.
- c) List out the merits and demerits of Penetration techniques.
- d) Discuss 'Thresholding' in brief.

P.T.O.

Part-II

Unit-I

3. Discuss and illustrate the working of Colour CRT monitors and Flat Panel Displays. **10**

OR

Discuss the following :-

- a) GKS and PHIGS
- b) RGB and CMYK

10

Unit-II

4. Explain 2 – D Transformation and 3 – D Transformation in detail with suitable example. **10**

OR

Discuss DDA algorithm for line drawing with the help of suitable example.

10

Unit-III

5. Discuss and differentiate between ‘Windows’ and ‘Viewport’ with the help of suitable example and illustration. **10**

OR

Explain Cyrus – beck Algorithm in brief with example.

10

Unit-IV

6. What is ‘Digital Image Processing’? Discuss its various application areas in brief. **10**

OR

Explain ‘Anti – aliasing’ with the help of example.

10
