# Code : 303502

## BCA 5th Semester Exam., 2019

GRAPHICS AND MULTIMEDIA

*Time* : 3 hours *Full Marks* : 60

*Instructions* :

*(i) The marks are indicated in the right-hand margin.*

*(ii) There are **SEVEN** questions in this paper.*

*(iii) Attempt **FIVE** questions in all.*

*(iv) Question Nos. **1** and **2** are compulsory.*

**1.** Choose the correct answer of the following (any *six*) : 2×6=12

*(a)* The number of pixels stored in the frame buffer of a graphics system is known as

*(i)* resolution

*(ii)* depth

*(iii)* resalution

*(iv)* None of the above

*(b)* The primary output device in a graphics system is

*(i)* scanner

*(ii)* video monitor

*(iii)* Neither *(i)* nor *(ii)*

*(iv)* printer







*(c)* On a black and white system with one bit per pixel, the frame buffer is commonly called as

*(i)* pixmap

*(ii)* multimap

*(iii)* bitmap

*(iv)* All of the above

*(d)* Types of computer graphics are

*(i)* vector and raster

*(ii)* scalar and raster

*(iii)* vector and scalar

*(iv)* None of the above

*(e)* Pixel can be arranged in a regular

*(i)* one-dimensional grid

*(ii)* two-dimensional grid

*(iii)* three-dimensional grid

*(iv)* None of the above

*(f)* Random scan systems are designed for

*(i)* line drawing application

*(ii)* pixel drawing application

*(iii)* color drawing application

*(iv)* None of the above

(g) Raster scan is ____ expensive than random scan.

(i) more

(ii) less

(iii) Both (i) and (ii)

(iv) None of the above

(h) What is the name of temporary memory, where the graphics data is stored to be displayed on screen?

(i) RAM

(ii) ROM

(iii) Frame buffer

(iv) None of the above

(i) Which one is the basic input device in GUI?

(i) Mouse

(ii) Graphics tablet

(iii) Voice system

(iv) Touch panel

(j) In beam penetration method of color CRT, two layers of phosphor coated are

(i) red and blue

(ii) red and green

(iii) blue and green

(iv) None of the above









2. Answer any *three* of the following : 4×3=12

(a) What is antialiasing?

(b) What are homogenous coordinates?

(c) What is the difference between an object and an image in computer graphics?

(d) Differentiate between CMY and HSV color models.

(e) Define computer animation.

3. What is aliasing? Explain. 12

4. What is transformation? Explain the types of transformation. 12

5. Explain Depth Buffer method and its limitations. 12

6. What is Bezier Curve? Explain its properties. 12

7. Explain scan line algorithm in detail. 12

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