

## SARDAR PATEL UNIVERSITY

T.V.B.C.A. (Fifth Semester) (CBCS) EXAMINATION, November- 2013

US05CBCA02 : Computer Graphics

Date:19/11/2013

Time:10:30 to 01:30

Total Marks : 70

Q.1 Multiple choice questions:

[10]

- 1 In \_\_\_\_\_ scan picture definition is stored as a set of intensity values
  - (a) Random
  - (b) Raster
  - (c) Proper
  - (d) None of the above
  
- 2 DVST stands for \_\_\_\_\_
  - (a) Direct Vision Storage Tube
  - (b) Direct View Static Tube
  - (c) Direct View Storage Tube
  - (d) None of the above
  
- 3 Beam penetration displays maximum \_\_\_\_\_ colors.
  - (a) 8
  - (b) 4
  - (c) 16
  - (d) 32
  
- 4 \_\_\_\_\_ is the equation for straight line.
  - (a)  $y = m \cdot x + b$
  - (b)  $y = m/x + b$
  - (c)  $y = m \cdot x \cdot b$
  - (d)  $y = m \cdot x - b$
  
- 5 \_\_\_\_\_ is produced by capping the connection between the two segments with a circular boundary.
  - (a) Round join
  - (b) Bevel join
  - (c) Square join
  - (d) Miter join
  
- 6 A \_\_\_\_\_ is a transformation that produces a mirror image of an object.
  - (a) Translation
  - (b) Reflection
  - (c) Rotation
  - (d) Shear
  
- 7 A world coordinate area selected for display is called \_\_\_\_\_.
  - (a) Window
  - (b) Viewport
  - (c) Clip Window
  - (d) None of these
  
- 8 Default frame rate is \_\_\_\_ fps.
  - (a) 30
  - (b) 60
  - (c) 12
  - (d) 15
  
- 9 Shortcut key to enter key frame in FLASH is \_\_\_\_\_.
  - (a) F5
  - (b) F6
  - (c) Shift + F5
  - (d) Shift + F6
  
- 10 You can use the \_\_\_\_\_ tool to copy fill and stroke attributes from one object and immediately apply them to another object.
  - (a) Free transform
  - (b) Ink bottle
  - (c) Eyedropper
  - (d) Fill Transform

Q.2 Attempt any ten out of twelve. [20]

1. Define term Resolution.
2. Define term Device coordinates and Modeling coordinates.
3. Differentiate between impact and non-impact printers.
4. Write only algorithm for Boundary Fill operation.
5. List attributes for the character. Explain any one.
6. Explain Gray scale in short.
7. Define rotation and reflexation.
8. What is scaling? And list out its types.
9. What is window-to-viewport or windowing transformation?
10. Define layer and frame.
11. Explain play and stop actions of movie clip.
12. Explain geturl actions to control browser network.

Q.3 (a) Explain working of CRT in detail. [4]

(b) List all types of input devices and explain any two in detail. [6]

OR

(a) Differentiate between Raster scan displays and Random scan displays. [4]

(b) Write short note on: 1.Shadow Mask Method 2.LED [6]

Q.4 (a) What is inside–outside test? Explain odd-even rule with example. [6]

(b) Explain flood fill algorithm (4-connected) with diagram. [4]

OR

(a) Write steps for Bresenham line drawing algorithm. [6]

(b) Write a note on color attribute. [4]

Q.5 (a) Explain in brief Sutherland Hodgeman polygon clipping algorithm. [4]

(b) What is text clipping? List out all types and explain it with example. [6]

OR

(a) Write a short note on Viewing Pipeline. [4]

(b) What is geometric transformation? List all 2-D geometric transformation and explain any one in detail. [6]

Q.6 Explain mask animation, motion tween animation and shape tween animation with example. [10]

OR

Q.6 1. What is onion skinning? Explain the use of onion skinning in detail. [10]  
2. Explain toolbox of flash in detail.