SARDAR PATEL UNIVERSITY
EXTERNAL EXAMINATION – November – 2013
B. Sc. (Computer Science) Semester V
US05CCSC06 : Computer Graphics and Multimedia

Date : 25-11-2013, Monday   Time : 10:30 A.M. TO 01:30 P.M.

Max Marks : 70

Q-1 Multiple Choice Questions   [10]

1 _____ is not the application of Computer Graphics.
   [a] Computer Aided Design   [b] Presentation Graphics
   [c] Power Point   [d] Computer Art

2 CRT stands for_____.
   [a] Cathode Ray Tube   [b] Computer Ray Tube
   [c] Common Ray Tube   [d] None of the Above

3 _____ is a primary input device for entering string.
   [a] Mouse   [b] Joystick
   [c] Trackball   [d] Keyboard

4 _____ obtained by adding a filled semicircle to each butt cap.
   [a] Round cap   [b] Circle cap
   [c] Projecting square cap   [d] Semi circle cap

5 _____ style is used to fill an area with selected hatching patterns-parallel lines or crossed lines.
   [a] Hatch   [b] Solid
   [c] Patterned   [d] Hollow

6 _____ is defined as the distance between the baseline and the cap line of the character.
   [a] Character height   [b] Character it self
   [c] Character body   [d] Character width

7 A _____ is applied to an object by repositioning it along a straight – line path from one coordinate location to another.
   [a] Scaling   [b] Translation
   [c] Shear   [d] Rotation

8 A world coordinate area selected for display is called _____.
   [a] window   [b] viewport
   [c] clip window   [d] none of these

9 _____ is the process of dividing the animation work involved into meaningful parts or / and allocates work between the animators.
   [a] Modulating   [b] de-modulating
   [c] both (a) & (b)   [d] None of above

10 The process of converting analog signals to digital signals by way of taking discrete samples is called _____.
   [a] digitizing   [b] non-digitizing
   [c] both (a) & (b)   [d] None of above

Q-2 Attempt any Ten questions. [20]
1 Define the terms: 1. Aspect Ratio 2. Resolution
2 Explain Beam Penetration method
3 List primary components Electron gun of CRT and state its functions.
4 List attributes for the line. Explain any one.
5 List various character attributes.
6 What is inside-outside test? List various methods used for the same.
7 What is clipping? List out all clipping object.
8 What is viewing transformation? What is window-to-viewport ?
9 Explain point clipping.
10 Define : Hypermedia, HyperText
11 List the Audio jacks.
12 Explain the need for audio editing.

Q-3 What is Computer Graphics? Explain in brief a major application area of Computer [10]
Graphics.

OR

Q-3 Explain in detail raster scan. Differentiate between Raster scan displays and Random scan [10]
displays

Q-4
A Write steps for DDA line drawing algorithm. [05]
B Explain boundary fill algorithm (4-connected) with diagram. [05]

OR

Q-4
A Write steps for mid-point circle generation algorithm. [05]
B Explain odd-even rule with example. [05]

Q-5
A Explain in brief Cohen Sutherland Line Clipping Algorithm. [05]
B What is text clipping? List out all types and explain it with example. [05]

OR

Q-5
A What is geometric transformation? List all 2-D geometric transformation and explain [05]
Rotation in detail.
B Explain in brief Sutherland Hodgeman polygon clipping algorithm. [05]

Q-6
A What is multimedia? Also explain various facets of multimedia. [05]
B Write a note on '2D Animation Techniques' [05]

OR

Q-6
A Write brief note on Multimedia Software. [05]
B Write brief note 'Audio Cards family' [05]

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