(6 pages) **Reg. No. :** .....

Code No. : 20993 **Sub. Code : GMCS 52/ GMSE 52**

B.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2017.

Fifth Semester

Computer Science/Software Engineering – Main

COMPUTER GRAPHICS AND MULTIMEDIA

(For those who joined in July 2012-2015)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer:

1. In beam penetration method, ———— and ———— layers of phosphor are usually used.
   (a) red and green
   (b) blue and green
   (c) yellow and green
   (d) orange and green

2. VDU is a ———— device.
   (a) Processing (b) Input
   (c) Peripheral (d) Hardware

3. ———— function is used to set the basic fill style.
   (a) setFillStyle(fs)
   (b) setFillStyleIndex(fs)
   (c) setInteriorStyle(fs)
   (d) FillType(ft)

4. The transformation in which an object is moved from one position to another in circular path around a specified pivot point is called
   (a) Rotation (b) Shearing
   (c) Translation (d) Scaling

5. The region code of a point is 1001. The point is in the ———— region of window.
   (a) Top right (b) Top left
   (c) Bottom left (d) Bottom right

6. The left (L bit) bit of the region code of a point (X,Y) is '1' if ————
   (a) X > XWMIN (b) X < XWMIN
   (c) X< XWMAX (d) X > XWMAX

7. The alternative name for depth buffer algorithm is

(a) X-buffer algorithm

(b) Y-buffer algorithm

(c) Z-buffer algorithm

(d) None of the above

8. _____ can be used to determine visible surfaces.

(a) Ray Scanning (b) Ray Plotting

(c) Ray tracing (d) Ray deduction

9. MIDI stands for

(a) Musical Instrument Digital Interface

(b) Musical Instrument Digital Instruction

(c) MP3 Instrument Digital Interface

(d) Musical Instrument Design Interface

10. Acronym for VRML:

(a) Virtual Reality Modeling Level

(b) Virtual Reality Modulation Language

(c) Virtual Rate Modeling Language

(d) Virtual Reality Modeling Language

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the working of Light pens.

Or

(b) Write note on Graphics software standards.

12. (a) Explain about character attributes.

Or

(b) Discuss the homogenous coordinates.

13. (a) How to split concave polygons?

Or

(b) Give a matrix to obtain for reflection of coordinate positions.

14. (a) Explain the Event mode of standard input functions.

Or

(b) Write note on Z-buffer method.

15. (a) Explain the various formats of sound file.

Or

(b) Write note on animation.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the working of Scanners and Mouse.

Or

(b) Develop an algorithm for Bresenhams line algorithm.

17. (a) Explain the attributes of output primitives.

Or

(b) Give an brief note on 2D Geometric Transformations.

18. (a) Write an algorithm to implement Line Clipping.

Or

(b) Explain the functions used to view two dimensional object.

19. (a) Explain the 3D Projections.

Or

(b) Describe the purpose of valuator device and Pick devices.

20. (a) Explain the video representation in Multimedia.

Or

(b) Write note on authoring tools.

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