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# B.C.A. DEGREE (C.B.C.S.S.) EXAMINATION, OCTOBER 2016

#### Third Semester

Core Course—COMPUTER GRAPHICS

(2013 Admission onwards)

Time: Three Hours

Maximum: 80 Marks

## Part A (Short Answer Questions)

Answer all questions.

Each question carries 1 mark.

- 1. Explain rotation?
- 2. What is resolution?
- 3. Define Random scan/Raster Scan displays.
- 4. What is shearing?
- 5. Define clipping?
- 6. List of various Text clipping methods.
- 7. Explain about B-spline curve?
- 8. What is projection?
- 9. What is clip window?
- 10. What is quad trees?

 $(10\times 1=10)$ 

## Part B (Brief Answer Questions)

Answer any eight questions. Each question carries 2 marks.

- 11. Explain about flat panel displays?
- 12. List different input devices.
- 13. Explain line clipping?
- 14. Differentiate between raster and vector graphics.
- 15. Explain about windows and icons.
- 16. What is meant by refresh buffer and frame buffer?

Turn over

- 17. How point clipping is done?
- 18. What is orthographic parallel projection?
- 19. Explain view distance.
- 20. What is a line cap?
- 21. Define scaling.
- 22. Define plotters.

 $(8 \times 2 = 16)$ 

### Part C (Descriptive/Short Essay Type Questions)

Answer any six questions. Each question carries 4 marks.

- 23. What are the steps involved in text clipping?
- 24. Write short notes on LCD
- 25. Write short notes on raster scan displays with neat diagram.
- 26. Briefly explain about different graphics softwares.
- 27. Explain DDA line drawing algorithm.
- 28. What are different constructive geometry construction techniques?
- 29. Write a note on window to viewport devices.
- 30. Explain mid-point circle algorithm.
- 31. Explain about composite transformation.

 $(6 \times 4 = 24)$ 

#### Part D (Essay)

Answer any two questions.

Each question carries 15 marks.

- 32. Explain Bresenham's line drawing algorithm.
- 33. Briefly describe about logical classification of input devices.
- 34. Explain in detail about various clipping techniques.
- 35. What are different interactive picture construction techniques?

 $(2\times15=30)$