(For candidates admitted from 2010 to 2015 batch)

B.C.A. DEGREE EXAMINATION, APRIL 2022.

Part III — Computer Applications — Major

COMPUTER GRAPHICS AND MULTIMEDIA

Time: Three hours

Maximum: 75 marks

SECTION A —  $(10 \times 2 = 20)$ 

Answer ALL questions.

- 1. Define Random scan displays.
- 2. What is Aspect ratio?
- 3. What is an output primitive?
- 4. What is Line Generation?
- 5. What is Transformation?
- 6. Define clipping.
- 7. List down elements of multimedia.

- 8. What is Solaris Live?
- 9. What are multimedia development tools?
- 10. What is image compression?

SECTION B —  $(5 \times 5 = 25)$ 

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

11. (a) Explain Raster Scan Display.

Or

- (b) Explain Flat Panel Display.
- 12. (a) Discuss how to load the frame buffer.

Or

- (b) Explain Boundary Fill Algorithm.
- 13. (a) Write short notes on Matrix Representation.

Or

- (b) Summarize types of lines in clipping operation.
- 14. (a) Explain the problems with multimedia.

Or

(b) Discuss about elements of multimedia.

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15. (a) List and explain capabilities possessed by multimedia authoring tools.

Or

(b) Explain Image compression in multimedia.

SECTION C —  $(3 \times 10 = 30)$ 

Answer any THREE questions.

- 16. Explain briefly about display processors.
- 17. Explain DDA algorithm with suitable illustrations.
- 18. Discuss the basic transformations in 2D geometric transformations with its types.
- 19. Explain briefly about different multimedia Hardware with its features.
- 20. Explain the following
  - (a) Audio Compression
  - (b) Audio Standards.

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