## **NOVEMBER/DECEMBER 2020**

## UECS53A — COMPUTER GRAPHICS

Time : Three hours Maximum : 75 marks

SECTION A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer ALL questions.

- 1. What is meant by output primitives?
- 2. Define frame buffer.
- 3. What are the types of Area fill attributes?
- 4. Write the formula for scaling transformation.
- 5. What is view port?
- 6. Write the logical classification of input device.
- 7. Define depth queuing.
- 8. What is meant by translation?
- 9. Define axonometric orthographic projections.
- 10. What is meant by view reference coordinate system?

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SECTION B —  $(5 \times 5 = 25 \text{ marks})$ 

Answer ALL questions.

11. (a) Explain about Random scan display.

Or

- (b) Discuss in detail about DDA algorithm.
- 12. (a) Explain about Gray scale style.

Or

- (b) Discuss matrix representation of 2D.
- 13. (a) Describe about Window to view port transformation.

Or

- (b) Explain about logical classification of input device.
- 14. (a) Elucidate the concept of parallel projection and perspective projection.

Or

- (b) Discuss about visible and surface identification.
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15. (a) Write a short notes on projection in 3D viewing.

Or

(b) Explain about back face removal.

SECTION C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 16. Discuss in detail about CRT.
- 17. Discuss in detail about line attribute.
- 18. Explain Cohen Sutherland algorithm with appropriate instances.
- 19. Explain about Three Dimensional Transformations.
- 20. Explain about Hidden surface and Hidden line removal.

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