

The Yenepoya Institute of Arts, Science, Commerce and Management

A Constituent Unit of Yenepoya (Deemed to be University)

V Semester First Internal Examination – September 2024 BCA504D - 2D and 3D Graphic Design

Duration: 1 Hour Max Marks: 30 Marks



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Section A

Answer any FOUR of the following questions $(4 \times 5 = 20)$

- **1.** Explain the working principle of stereoscopic 3D displays. How do they differ from standard 2D displays?
- **2.** Explain the concept of diffuse reflection. How does it contribute to the appearance of objects in a 3D scene?
- **3.** Outline the steps involved in texture mapping. How does texture mapping improve the realism of a 3D model?
- **4.** Explain the phenomenon of aliasing in computer graphics. What are some common methods to reduce aliasing effects?
- **5.** Discuss the basic differences between vectors and coordinate vectors. How are they used in graphics?
- **6.** Describe the process of flat shading in computer graphics. When would you prefer to use this technique?

Section B

Answer any ONE of the following

 $(1 \times 10 = 10)$

- **7.** Compare CRT and flat panel displays in terms of their working principles, advantages, and disadvantages.
- **8.** Describe the different types of specular reflection models and their applications in computer graphics.

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