Total number of printed pages: 1

Programme- UG

Semester-6th

Paper Code-UMCD602

2024

Computer Generated Lighting and Rendering

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

*Answer **any five** questions.*

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1. **a.** What is *Three-point* lighting? Describe *Three-point* lighting techniques using Maya software. Explain your answer with proper diagrams. **2+6+2=10**

   b. Explain different types of *Arnold lights* in Autodesk Maya with proper illustrations. **10**

2. **a.** What does "*Atmosphere Volume*" refer to in 3D lighting? Explain the role of Atmosphere Volume in creating various environments. **4+6=10**

   b. What is *Skydome Light*? Describe the advantage and disadvantages of using *Skydome Light* to create any 3D scene. **2+8= 10**

3. **a.** What is *3D rendering*? What are the differences between 3D *Lighting* and *Rendering*? **10**

   b. Explain the function of the *Physical Skye light* in 3D lighting. Describe all the attributes of *Physical Skye light* with proper illustrations. **4+6=10**

4. **a.** What does the term *'light filter'* refer to in Autodesk Maya? Describe the various light filters and their respective functions in the context of lighting a 3D scene. **2+8= 10**

   b. How does *photometric light* contribute to creating any 3D scenes, and what are its applications in scene design and rendering? **10**

5. Discuss the process of making a 3D animated movie, outlining its different phases, and elaborate on the importance of a Lighting Artist in enhancing the overall movie experience. **10+10=20**

6. **Write all the short notes *(Each carrying 5 marks)*** **5x4=20**

   a. Ai AtmosphereVolume
   b. Ai Gobo.
   c. Photometric Light.
   d. Spot Light Attributes.