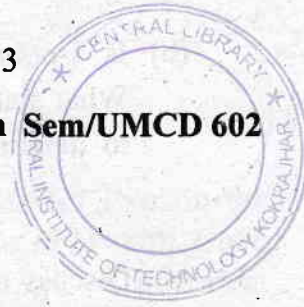


Total number of printed pages = 3

19/6th Sem/UMCD 602



2022

**COMPUTER GENERATED LIGHTING
AND RENDERING**

Full Marks – 100

Time – Three hours

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

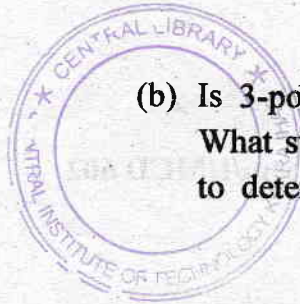
Answer any *five* questions.

1. (a) What is CG Lighting? Describe the correlation between 3D Lighting and Rendering. 2+8=10

(b) What are the several types of lights in Maya software? Describe the various lights setup and their applications with proper diagrams. 2+8=10

2. (a) What is 3-point lighting? Describe the position of the 3-point light and explain each of their functions. 2+8=10

[Turn over



- (b) Is 3-point lighting used for lighting a set?
What statements which need to be examined
to determine whether they are yes or no?

1+9=10

3. (a) Discuss any three various texture maps and
its application. How texture maps play
significant roles in making a better 3D render
scene?

6+4=10

- (b) Discuss the importance of 'Materials' in 3D
software? How *Arnold ai Standard Surface*
material is different from Blinn material?

5+5=10

4. (a) What is *Skydome light* in Maya? Explain the
purpose of *Skydome light* and its importance
in lighting.

2+8=10

- (b) Explain the differences between Exposure,
Samples and Radius in Arnold Light Attributes.

10

5. Write short notes on the following: 5×4=20

(a) Maya Hypershade

(b) Light attributes in Maya

(c) Arnold Atmosphere Volume

(d) Skydome light.

6. What is volumetric light in Maya ? Explain the co-relation between *volumetric light* with *Gobo* (light filter). Why *volumetric light* is important when rendering a 3D environment ? 20

