AMT-502/CGL/5th Sem/2017/M

CG LIGHTING

Full Marks – 70

Pass Marks – 28

Time – Three hours

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

Answer any *seven* questions.

Illustrate your answers with suitable sketches and examples wherever necessary.

1. What do you understand by 'light' ? Explain what are shadows. Give diagrams to support your answer.   4+4+2=10

2. What are direct light and indirect light ? Explain with suitable diagrams and examples.   5+5=10

3. Describe Directional Light and Volume Light with suitable diagrams and examples. 5+5=10

4. (a) What are artifacts ? How can you get rid of them ?   5

   (b) What is the Penumbra Angle ? Draw diagrams to support your answer.   5

5. Describe the 'Barn Door' attribute of a spot light with suitable diagrams. 10

6. Explain the terms "Rendering in Layers" and "Rendering in Passes". 10

7. Describe the following render passes and explain why they are required : 5+5=10

   (a) RGB Matte Pass

   (b) Z-Depth Pass.

8. What are the key inputs you look for before lighting a 3D scene ? 10

9. Write short notes on any *five* of the following : 5×2=10

   (i) Negative intensity

   (ii) Point light

   (iii) Light decay

   (iv) Self-shadow

   (v) Light fog

   (vi) Photons

   (vii) Caustics.