CIT 771 –   INTRODUCTION TO COMPUTER GRAPHICS AND ANIMATION

Instruction: Answer Any Five Questions

Time Allowed: 3 Hours

1a.   Explain what is meant   by computer graphics   4marks
 b.   List the six major elements of a graphic system.   6marks
 c.   List four major areas of computer graphics.   4marks

2a.   Explain what is meant   by BRDF   4marks
  b.   Explain the two classes and two properties of BRDFs.   10marks

3a.   Explain the term transformations.   3 marks

 b.   Outline, with an example each, the three classes of transformations.   9 marks

 c.   What are homogeneous coordinates?   2 marks

4a.   Explain the thin lens Camera Model.   5 marks
  b.   Define focal length.   3 marks
  c.   Outline two important properties of perspective projection.   6 marks

5a.   Explain what is meant   by rasterization   4 marks

 b.   Explain Z-buffering and state one of its uses.   4 marks

 c.   Outline the three major techniques of mapping methods.   6 marks

6a.   What are models?
5 marks
  b.   State two advantages and three disadvantages of hierarchies.
              5 marks
  c.   State two applications of models.
4 marks

7a.   Explain what is meant   by keyframing
        3 marks

 b.   State two advantages and two disadvantages of keyframing.
        4 marks

 c.   What is motion capture?
        3 marks

 d.   Enumerate two advantages and two disadvantages of motion capture.   4 marks