

**R09**

**Code No: C6304**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**M.Tech I Semester Examinations March/April-2011**

**ADVANCED COMPUTER GRAPHICS**

**(IMAGE PROCESSING)**

**Time: 3hours**

**Max.Marks:60**

**Answer any five questions  
All questions carry equal marks**

- - -

1. a) Differentiate Polygon based representation and Edge based representation.  
b) Explain various aspects of Reflection. [12]
2. Write an algorithm for Anti aliased Soft Shadows. [12]
3. Explain different View-Dependent Mapping Techniques. [12]
4. Explain the following:  
a) Ray Coherence.  
b) Spatial Coherence.  
c) Backwards Ray tracing. [12]
5. Explain Cone tracing with relevant examples. [12]
6. What is Global Illumination? Give a rendering equation for global illumination. [12]
7. Illustrate goals of Render Man shading language. [12]
8. a) Differentiate Forward kinematics and Inverse kinematics in computer animation.  
b) Explain Deformation of B-Spline patch representation. [12]

\*\*\*\*\*