

## 1999 Paper 9 Question 4

### Advanced Graphics

Describe the Model Human Processor. [5 marks]

Explain the limitations of the Model Human Processor. [2 marks]

List the three ways of combining objects using constructive solid geometry (CSG). Describe how an object built using CSG can be represented using a binary tree. Given the intersection points of a ray with each primitive in the tree, explain how these points are passed up the tree by each type of combination node to find the first intersection point of the ray with the whole CSG object. [8 marks]

Explain what a form factor is, in radiosity. Outline an implementable method of calculating form factors. [5 marks]