

## 1993 Paper 9 Question 5

### Designing Interactive Applications

Explain the term *user's conceptual model*. How is the user's conceptual model formed? [4 marks]

Describe Fitts' law and Hick's law and explain how each might influence the design of an information display. [4 marks]

The receptionist at a small research laboratory is required to field incoming messages and make sure that they reach the recipient in a timely manner. Some messages arrive by word of mouth, others by phone, courier, e-mail or FAX. There are about 100 recipients, most of whom are researchers. They spend a large proportion of their time in meetings of one sort or another, some of which are held in offices, the remainder in conference rooms. The receptionist endeavours to avoid interrupting important meetings unnecessarily.

It is proposed to build a system based upon Active Badge technology to improve message handling activities in the laboratory. Each member of staff wears an active badge. An existing Location Server provides client applications with up-to-date information about the location and movements of each active badge.

Imagine you have to develop a requirements specification that might reasonably arise from your own investigations. Write down three or four key requirements. [2 marks]

On *one* side of paper, draw up the screen layout for your proposed application and annotate it with the rationale for each key design decision. [10 marks]