

## 1996 Paper 12 Question 9

### Databases

Describe the essentials of the ODMG-93 standard for Object Database Management. [7 marks]

To what extent do these proposals conform to the ANSI/SPARC architecture for database management? [3 marks]

Describe how binary relationships can be modelled directly within the ODMG-93 standard. [4 marks]

In what way is it possible to create a representation for  $n$ -ary relationships that is similar to that of the relational model? [2 marks]

Explain how these alternative approaches allow a navigational style of data manipulation as well as supporting an extension of SQL. [4 marks]