1998 Paper 7 Question 8

Database Topics

Describe the main features of the Data Language DAPLEX, paying particular attention to the following points:

(*a*) schema definition and maintenance

(*b*) primitive and derived data

(*c*) entity specialisation

(*d*) consistency constraints

[9 marks]

Explain how aggregates are handled in DAPLEX, paying particular attention to the following:

(*e*) composition of many-valued functions

(*f*) calculation of averages

(*g*) inverse functions

(*h*) multiple inheritance

[7 marks]

The DAPLEX paper received a great deal of attention when it appeared in 1981. Why do you think that was, and why is the work largely forgotten today?

[4 marks]