1994 Paper 2 Question 7

A small electronic mail system has been installed in your organisation, allowing the dozen or so workers in your group (all users of a single central server computer) to send each other messages about their work. There is now talk of extending this mail system to provide contact with several hundred other sites, each of which has from a dozen to a few hundred workers. For political reasons it will be necessary to construct a new mail system for this enlarged group, rather than buy in services from some commercial organisation that provides existing hardware or software.

Discuss some of the problems that will have to be considered in the design of the new mail system. Concentrate on ways that electronic mail will interact with the body of users rather than on any fine technical details of a design. In particular consider:

(*a*) Mail redirection when a user moves to a new location;   [5 marks]

(*b*) Circulation lists and multiple copies of mail;   [5 marks]

(*c*) Recovery of the cost of setting up and running the mail service;   [5 marks]

(*d*) The possible alternative of using existing telephone lines and installing a large number of FAX machines.   [5 marks]