1995 Paper 10 Question 8

Operating System Functions

What properties of file access and of discs does a *log-structured* file system use to optimise file system performance? Describe scenarios in which the relevant assumptions are valid and invalid. [8 marks]

Describe the operation of such a file system, including the actions of the *sweep*, or *garbage collection*, stage, and how the system recovers from crashes. [12 marks]