Chapter 5

Chapter 5 discusses the infrastructure associated with IT. This infrastructure consists of: computer hardware, computer software, data management technology, networking and telecommunications technology, and technology services. The chapter differentiates between personal computers, workstations, server computing, mainframes, supercomputers and grid computing. Mainframes process enormous quantities of data very quickly, while supercomputers are used for tasks that need rapid and complex calculations with tons of variables, measurements, and equations. Multi-tiered client servers allow client requests to be used by different layers of servers. Input devices (mouse, keyboard etc.) are contrasted with output devices (monitors, printers, audio output). A differentiation is also made between OS software and application software.

Chapter 6

This chapter dives into databases and information management. Relational databases are the most commonly used databases. These are made up of generalized categories called entities and category characteristics called attributes. Data hierarchy moves up from bit, byte, field, record, file to database. Databases are organized in 2-dimensional tables: there are rows (also called records or tuples) and while columns. All relational database entities have columns that consist of a Primary Key (a non-replicable, unique identifier for the record). Microsoft Access is a commonly used DBMS for small business, while DB2, Oracle Database, and Microsoft SQL Server are DBMS for large mainframes and midrange computers. MY SQL is a popular open source DBMS.