1. Arguably, the most important piece of software running on many computers is the operating system.

Explain what the role of the operating system is and why it is needed. Your answer should address at least some of the following points:

A brief history of the operating system

The purpose of the operating system

The role of the operating system in memory management

The role of the operating system in file management

The role of the operating system as a user interface

The future of operating systems

Your answer may look at general principles, or you may take examples from one or more actual operating systems.

1. Briefly explain the meaning of the following two technologies and provide examples of their application:
   1. Bluetooth
   2. WiFi
2. Many people would state that the most important software in a computer is its operating system.

a) Using examples, briefly describe the main functions of an operating system.

b) Comment on recent developments in the field of operating systems.

1. Differentiate between LAN and WAN.