1. What arethe subsystems of the Neumann computer models? （6 points）

**The subsystems are the memory, arithmetic/logic unit, control unit, and input/output**

内存，算术逻辑单位，控制单位，输入输出单位

2. What are the functions of the three buses that connect the CPU with memory? （8 points）

**The data bus is used to transfer data to and from memory. The address bus allows**

**access to particular words in memory. The control bus is used to control the operations**

**of the CPU and memory.**

使用数据总线传输数据和内存。地址总线允许

在内存中访问特定的词。控制总线是用于控制操作

CPU和内存。

4. What is the components of an operating system? (8 points）

**The components of an operating system are: memory manager, process manager,**

**device manager, file manager, and the user interface**

一个操作系统的组件包括:内存管理器,过程管理,

设备管理器、文件管理器和用户界面

5. Name the layers of the OSI(Open Systems Interconnection) model. (8 points)

**The seven layers of the OSI model are: physical, data link, network, transport, session,**

**presentation, and application**

OSI模型的七层:物理、数据链路、网络、运输、会话,

演示和应用程序

6. Whatis meant by the software life cycle? (8 points)

**Software goes through a cycle of repeating phases until it becomes obsolete.**

**软件经过一个周期的循环阶段,直到它变得过时了。**

2. Name five types of data that a computer can process. （6 points）

**Text, numbers, images, audio, and video**

**文字、数字、图像、音频和视频**

4. Define the term ***overflow***.

**Overflow happens when the result of an arithmetic operation is outside the range**

**of possible values for the bit allocation being used.**

溢出发生在算术运算的结果超出了范围

一些可能的值的分配使用

5. What is the USB controller? （6 points）

**The USB (universal serial bus) controller is a serial controller used to communicate**

**with slower devices. It also supplies power to the devices.**

USB(通用串行总线)控制器是一个串行控制器用来交流

与较慢的设备。它还提供电力的设备。

6. What are the four phases in software development? （8 points）

**Analysis, design, implementation, and testing**

**分析、设计、实现和测试**

7. Name the layers of the TCP/IP protocol suite. （7 points）

**The layers of the TCP/IP protocol suite are: network, transport, and application.**

**层的TCP / IP协议套件包括:网络、运输、和应用程序。**

***8***. Define software engineering.

**Software engineering is the establishment and use of sound engineering methods**

**and principles to obtain reliable software that works on real machines.**

软件工程是建立和完善的工程学方法的使用

和原则来获取可靠的软件,在实际机器上工作。

***9***.Name the logical binary operation.?

**The logical binary operations are: AND, OR, and XOR.**