# Study questions chapters 3 and 4

1. **Why would you want to eliminate cable clutter in the computer case and how could you go about it?**

To avoid interference with other components.

To solve this issue a modular power supply can be used, or cable ties to keep them in place.

1. **Name at least 3 types of power connectors.**

* Molex connector
* Berg connector
* 20/24-pin connector
* 6/8 PCIe connector
* SATA connector

1. **What is an I/O connector plate and where does is go?**

It is a thin removable metal plate that protects and keeps the I/O ports in place. It goes at the back of the case.

1. **Why should you think twice before unplugging the front panel connectors from the motherboard?**
2. **Which type of motherboard expansion slot has four types ranging from x1 to x16 with each type having a different length of expansion slot?**

The PCI express expansion slots

1. **What do the following acronyms stand for?**

POST: Power On Self Test

BIOS: Basic Input and Output System

UEFI:  Unified Extensible Firmware Interface

1. **How does the POST indicate an error?**

It issues a number of short beeps.

1. **What is the function of the BIOS?**

Performs a check on all internal components

1. **What are some (at least 3) of the main menu options of the BIOS?**

\* Advanced

\* Security

\* Boot

1. **What is firmware in the context of motherboards?**

Firmware is a type of software that has low-level control over a device’s hardware, in this case, the BIOS itself can be considered as Firmware.

1. **Why is it recommended to use ‘Signed Drivers’?**

Because those drivers have passed quality tests and are certified by Microsoft

1. **What is compressed air used for in computer maintenance?**

To clean the dust

1. **What environmental factors can affect a computer?**

* Humidity
* Temperature

1. **What are some tasks (at least 2) that could be included in a preventative maintenance plan?**

* Dust Cleaning
* Antivirus scanning

1. **What action should be taken before troubleshooting a computer?**

Back up the customer’s data

1. **After troubleshooting and fixing a problem with a computer, what 2 things should a computer technician do?**

Verify the full system functionality and apply maintenance procedures

1. **What are some (at least 3) possible reasons a computer might not boot?**

* Loose memory modules
* Unplugged cables
* Corrupted Drivers
* Wrong boot order

1. **Give an example of an open-ended question a computer technician might ask a customer.**

What were you doing when the problem was identified?

1. **Give an example of a close-ended question a computer technician might ask a customer.**

Can you reproduce the problem?