**Data is transmitted across a wired network in packets.**

**Packets sometimes fail to reach their intended destination due to malware attacks.**

**Explain one other cause of packet loss.**

Another reason for packet loss could be if the network goes down. This inquires that if there is no connection bet the end devices and the router, packets wouldn’t be able to reach their desired destination.

(2)

**Hospitals use computerized monitoring systems to monitor a patient’s vital signal 24 hours a day. These systems can alert medical professionals to any significant changes.**

**These systems usually run on an embedded, real-time, operating system.**

**Explain why a real-time operating system is suitable for this purpose.**

A real-time operating system is suitable for this situation because slight changes to a patient’s vitals could mean life or death. Due to this, it is important to have a signal to indicate any changes and alert medical professionals as soon as it happens.

(3)

**Explain one benefit of using Advanced Programming Interfaces (APIs) to log a user onto a website.**

Users will not have to make a new account just for that site because APIs allow users to log into a website using a service like google.

To connect

By connecting the laptop to the router with an ethernet device, it will make sure that you will always have a network connection wherever you are if it’s still connected. This is because it has nothing to interfere with the connection. This is an advantage because it will reduce packet loss

Explain one reason why she uses metadata on its website

It increases the chances of their website appearing in response to a search engine request which will increase traffic to their website.