**YEAR 11 INFORMATION TECHNOLOGY**

**CASE STUDY - NETWORKS**

Sid Shifty is the owner and manager of Shifty Autos. In addition to himself as the manager, he also employs two sales people and a mechanic. Currently the office runs the following information system:

Sid stores all the sales data on his personal computer which is located in a corner of the main showroom. The computer is about five years old, and it seems to be working OK, although sometimes it is a little slow to boot up in the mornings. It is running Windows XP, has 512 MB of DDR memory, a 56 Kb modem and a 40GB hard drive and a 1.7GHz Pentium M processor.

Sid doesn’t know much about computers. When he first purchased the computer, it had 12 months anti-virus protection, however he hasn’t paid the bill to upgrade it since. He figures that he has never had a virus, so he doesn’t need it. Sid has internet and email access on his computer.

Sid also has his own printer attached to this computer – he prints out monthly sales figures and other important financial and legal documents. He also uses it to print out contracts with customers, which may contain confidential information regarding names, addresses and income. Any unwanted printouts just go straight into the bin.

The office is shared between Sid and the two sales people. There is one computer and printer which both the sales people share. The data which is on this computer relates to the repair side of the business – when customers come in to have their vehicles serviced or repaired, one of the salespeople enter the details onto the computer, and an invoice is generated when the job is complete. Any of the sales staff can log into this computer by typing in the same user name (staff) and password (shifty).

If they want to look up any information relating to sales (past or present), they have to go through Sid, who is often taking a “long lunch” at the pub with his mates. Sometimes sales are lost because the salespeople are not able to access the required data quickly and efficiently and customers just walk away. Any emails for the sales team are downloaded, printed and distributed by Sid. He doesn’t want the sales people having their own email or internet access because he thinks they will just use it to waste time chatting to their friends, or surfing the net when they should be working. (Sid is a little old fashioned in this regard). If they need to reply to an email, they have to write it down, give it to Sid and he types and sends it.

A couple of months ago, one of Sid’s friends, Dan Dodgy, had a fire in his caryard which destroyed all his customer records. Sid doesn’t want the same thing to happen to him, so he has decided that once a month he will make a copy of all the data on his computer. The backup CD will then be stored in the drawer of his desk.

The caryard is patrolled by a friendly Labrador dog when it is closed. Should any burglar get past this highly trained “attack machine”, there is a standard lock on the front door of the office and a fake camera (made of a tin can) which looks as if it might be some sort of recording device. Sid doesn’t have any specific security devices on his computers – he figures the cars in his yard are more valuable.

Sid has employed you to

1. Point out the flaws/problems in his current system (you need to comment on each paragraph – sometimes there will be more than one problem per paragraph!)
2. Suggest the best method of solving each of the problems identified. Give your reasons.