

1. Look at the following advert for a computer system

Dell Inspiron 570, Sempron 140, 4GB, 320GB, Int X4500, Win 7 Desktop



a) How much memory does this computer come with?

.....

[1]

b) What does the “320GB” mean?

.....

[1]

c) Name 1 piece of software that is included with the computer.

.....

[1]

2. Complete the following table, marking which category each of the following devices falls into.

| Device | Input | Output | Storage | Processing | Communication |
|-------------|-------|--------|---------|------------|---------------|
| Keyboard | | | | | |
| Touchscreen | | | | | |
| USB stick | | | | | |
| Modem | | | | | |
| CPU | | | | | |
| Scanner | | | | | |

[4]

3. Paul takes his computer to a local computer shop complaining that it is too slow when playing games. The computer has an 800MHz processor, 512MB of RAM, a CD-ROM drive and a 40GB hard disc.

a) Explain the purpose of RAM.

.....
.....
.....
.....

[3]

b) Suggest two components Paul could upgrade to make his computer run faster and explain how it will make the computer run quicker:

i. Component:

Reason:

.....

ii. Component:

Reason:

.....

[4]

c) The computer shop recommends that Paul buys a new computer instead, but Paul is concerned about the environmental impact of throwing his old computer away.

Discuss the advantages and disadvantages of buying a new computer instead of upgrading an old one and advise Paul what he should do. You should focus on the environmental impact and the cost.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

[6]

4. Phyllis is learning about the CPU

a) Explain the purpose of the CPU.

.....
.....
.....

[2]

b) Explain why increasing each of the following will make a computer system faster.

i. Clock speed.

.....

ii. Cache size.

.....

iii. Number of cores.

.....

[3]

5.

a) Give 2 differences between RAM and ROM.

i.

ii.

[2]

b) A computer system has an 8MB cache and 2GB of memory.

i. Does the computer have more cache or more memory?

.....

ii. Explain the purpose of the cache

.....

.....

iii. Explain what is meant by “Virtual Memory”

.....

.....

.....

[3]

6. Kevin needs to make a backup of his photography portfolio. He also needs to be able to send copies of his work to potential clients.

a) Explain why keeping a backup is important.

.....
.....
.....

[2]

b) Give 1 example for each of the following storage technologies.

i. Optical

.....

ii. Magnetic

.....

iii. Solid State

.....

[3]

c) Discuss the advantages and disadvantages of the storage technologies above and advise Kevin on what storage method to use for each of his two problems.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

[6]

- 7. A shopkeeper needs software to manage the accounts of her shop. She decides to use off-the-shelf software instead of custom written software.

Describe **two** advantages to the shopkeeper of off-the-shelf software, compared to custom written software

Advantage 1

.....
.....
.....
.....

Advantage 2

.....
.....
.....
..... [4]

- 8. Describe the following types of common utility programs.

(a) Antivirus

.....
.....
.....
..... [2]

(b) Disk defragmenter

.....
.....
.....
..... [2]