

**01.1** The following are types of memory and storage (labelled A – F):

A. Cache memory

B. Magnetic media

C. Non-volatile memory

D. Optical media

E. ROM

F. Solid state media

For each of the descriptions in the table, write the label of the type of memory or storage it best describes.

| Description  | Label |
|--|-------|
| Uses a laser to read the data                            |       |
| Contents cannot be edited                                |       |
| Small and very fast storage found close to the processor |       |

**[3 marks]**

**01.2** Bob purchases a 4GB SD card for use as secondary storage in his phone. Calculate how many megabytes there are in 4GB. Show your working.

**[2 marks]**

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.....

.....

Answer: .....

**01.3** An SD card is a type of solid state storage.

State **two** advantages of solid state storage compared to magnetic storage.

**[2 marks]**

1. ....

.....

2. ....

.....

**01.4** Many modern desktop computers have both solid state drives and magnetic hard disk drives.

Give **two** reasons why desktop computers have a magnetic hard disk drive and a solid state drive instead of having just a solid state drive

**[2 marks]**

1. ....  
.....

2. ....  
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**01.5** Explain how data is read from optical media such as a DVD.

**[5 marks]**

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**01.6** A student is asked to compare solid state drives, magnetic hard drives and optical media such as CDs. This is the student's answer:

"Both a solid state drive and a hard drive contain moving parts although the way they store data is different. Both solid state drives and hard drives can have large storage capacities but a hard drive's capacity is commonly greater. Both can be greater than standard CDs. Data is read more quickly from a hard drive than from a normal CD. Data is also read more quickly from a hard drive than from a solid state drive."

The student has made two errors in their answer. Identify each error and explain why the student is wrong.

**[4 marks]**

1. ....  
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2. ....  
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