**Zuckerberg**

**Q1.**

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 (A – F)** |
|  | Uses a laser to read the data |  |
|  | Contents cannot be edited |  |
|  | Small and very fast storage found close to the processor |  |

**(Total 3 marks)**

**Q2.**

A typical computer’s main memory consists of both volatile memory and non-volatile memory.

(a)      Explain what is meant by the term **volatile memory**.

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**(1)**

(b)     What is normally stored in the non-volatile part of a computer’s main memory?

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**(1)**

**(Total 2 marks)**

**Q3.**

Define the following terms.

(a)     Hardware

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**(2)**

(b)     Software

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**(2)**

**(Total 4 marks)**

**Lovelace**

**Q4.**

Two typical secondary storage devices, with the same cost, are advertised as follows.

|  |  |
| --- | --- |
| **Device A** | **Device B** |
| Solid state drive, capacity 128GB | Magnetic hard drive, capacity 1TB |

(a)     State **one** reason why **Device B** could be considered a better choice than **Device A**.

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**(1)**

(b)     State **two** reasons why **Device A** could be considered a better choice than **Device B**.

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**(2)**

**(Total 3 marks)**

**Q5.**

An SD card is a type of solid state storage.

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

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**(Total 2 marks)**

**Q6.**

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.

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**(Total 2 marks)**

**TURING**

**Q7.**

Tablet computers normally use solid state storage media instead of magnetic storage media.

State and explain **two** differences, other than cost and storage capacity, that make solid state media a better choice than magnetic media for tablet computers.

Difference 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Difference 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explanation 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**(Total 4 marks)**

**Q8.**

Explain how data is read from optical media such as a CD.

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**(Total 5 marks)**

**Q9.**

Describe how data is stored on, and read from, a magnetic hard disk.

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**(Total 4 marks)**