03 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. A solid state drive does not use a laser to read data but hard drives and optical media both do. 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 factual errors in their answer. One error is stated and explained below (the explanation contains the reason why it is an error):

> Error 1 A solid state drive contains moving parts.
>
> Explanation 1 A solid state drive is made of electrical circuits.

03.1 State and explain **two** further errors the student has made in their answer.

[4 marks]

One mark for each error (order is not important) and another mark for the associated explanation:

(Error) A hard drive reads data with a laser;
(Explanation) Hard drives use magnets to read data;

(Error) A hard drive reads data more quickly than a solid state drive
(Explanation) A hard drive has moving parts which make it slower to read data than a solid state drive

Note for examiners: explanation must be more than just a restatement of the error.

03.2 Both a solid state drive and a hard drive are examples of secondary storage. Explain why secondary storage is often needed as well as RAM in computer systems.

[2 marks]

Two of:

- data/instructions need to be stored permanently;
- secondary storage is persistent/not volatile;
- main memory/RAM is volatile/not persistent;