MODULE B MEMORY AND STORAGE · B5

Choosing storage

Original practice questions · ~25 minutes · 21 marks · J277 spec 1.2.2

Name _____ Date _____

Instructions. Answer all questions in the spaces provided. The marks for each part are shown in brackets [ ]. The total for this worksheet is **21 marks**.

1

Total: 5 marks

Storage devices can be compared using six characteristics: capacity, speed, portability, durability, reliability and cost.

(a) Tick (✓) one box in each row to show which characteristic is being described. **[4]**

Description	Capacity	Speed	Portability	Reliability	Cost
How quickly data can be read from and written to the device					
How easy the device is to carry from place to place					
The amount of data the device can hold					
How consistently the device stores and returns data correctly over time					

(b) State what is meant by the **durability** of a storage device. **[1]**

2 **Total: 4 marks**

A lighting technician works for a touring theatre company. She carries a laptop between theatres every week in a backpack, and uses it to open large lighting plans quickly during rehearsals.

(a) Identify the most suitable type of secondary storage for the laptop. Justify your choice. **[4]**

3 **Total: 4 marks**

A county records office scans old maps and letters. It needs to keep many terabytes of scans on a server that stays in one room and is never moved. Its budget is small.

(a) Identify the most suitable type of secondary storage for the server. Justify your choice. **[4]**

4 Total: 4 marks

A folk band records an album. They want to sell copies of it at their concerts, and post copies to people who order online. They plan to put the album on optical discs.

(a) Explain **one** advantage of using optical discs for the band's album. **[2]**

(b) Explain **one** disadvantage of using optical discs for the band's album. **[2]**

5 Total: 4 marks

(a) Tick (✓) one box in each row to show whether each statement is true or false. **[4]**

Statement	True	False
Solid state storage lasts forever because it has no moving parts.		
Solid state storage usually reads and writes data faster than magnetic storage.		
Magnetic storage is usually cheaper per gigabyte than solid state storage.		
Optical discs usually have a higher capacity than magnetic hard disk drives.		

Total for this worksheet: 21 marks