

MEMORY AND STORAGE

TOTAL MARKS:14

QUESTION 1:

- 3** Five statements are shown about Random Access Memory (RAM), an internal Solid State Drive (SSD) and a USB flash memory drive.

Tick (✓) to show which statements apply to each component. Some statements may apply to more than **one** component.

Statement	Component		
	RAM (✓)	Internal SSD (✓)	USB flash memory drive (✓)
it is a type of primary storage			
it is volatile			
it uses NAND and NOR technology			
it does not have any moving parts			
it is not directly connected to the central processing unit (CPU)			

[5]

ANSWER:

Question	Answer	Marks																											
3	<p>One mark for each correct row</p> <table><tr><th rowspan="2">Statement</th><th colspan="3">Component</th></tr><tr><th>RAM (✓)</th><th>Internal SSD (✓)</th><th>USB flash memory drive (✓)</th></tr><tr><td>it is a type of primary storage</td><td>✓</td><td></td><td></td></tr><tr><td>it is volatile</td><td>✓</td><td></td><td></td></tr><tr><td>it uses NAND and NOR technology</td><td></td><td>✓</td><td>✓</td></tr><tr><td>it does not have any moving parts</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>it is not directly connected to the Central Processing Unit (CPU)</td><td></td><td>✓</td><td>✓</td></tr></table>	Statement	Component			RAM (✓)	Internal SSD (✓)	USB flash memory drive (✓)	it is a type of primary storage	✓			it is volatile	✓			it uses NAND and NOR technology		✓	✓	it does not have any moving parts	✓	✓	✓	it is not directly connected to the Central Processing Unit (CPU)		✓	✓	5
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QUESTION 2:

7 Cassie stores data for her business every day. She stores the data using optical data storage.

(a) Identify **three** examples of optical data storage.

Example 1

Example 2

Example 3

[3]

(b) **Six** statements are given about the operation of three different types of storage.

Tick (✓) to show which statements apply to each type of storage. Some statements may apply to more than **one** type of storage.

Statement	Type of storage		
	Magnetic (✓)	Optical (✓)	Solid state (✓)
this storage has no moving parts			
this storage uses a laser to read and write data			
this storage uses a read/write head			
this storage burns pits onto a reflective surface			
this storage uses NAND and NOR technology			
this storage stores data in tracks and sectors			

[6]

ANSWER:

Question	Answer	Marks																																
7(a)	Three from: <ul style="list-style-type: none">• CD• DVD• Blu-ray	3																																
7(b)	One mark for each correct row <table><tr><th></th><th colspan="3">Type of storage</th></tr><tr><th>Statement</th><th>Magnetic (✓)</th><th>Optical (✓)</th><th>Solid state (✓)</th></tr><tr><td>this storage has no moving parts</td><td></td><td></td><td>✓</td></tr><tr><td>this storage uses a laser to read and write data</td><td></td><td>✓</td><td></td></tr><tr><td>this storage uses a read/write head</td><td>✓</td><td>✓</td><td></td></tr><tr><td>this storage burns pits onto a reflective surface</td><td></td><td>✓</td><td></td></tr><tr><td>this storage uses NAND and NOR technology</td><td></td><td></td><td>✓</td></tr><tr><td>this storage stores data in tracks and sectors</td><td>✓</td><td>(✓)</td><td></td></tr></table>		Type of storage			Statement	Magnetic (✓)	Optical (✓)	Solid state (✓)	this storage has no moving parts			✓	this storage uses a laser to read and write data		✓		this storage uses a read/write head	✓	✓		this storage burns pits onto a reflective surface		✓		this storage uses NAND and NOR technology			✓	this storage stores data in tracks and sectors	✓	(✓)		6
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