MODULE B MEMORY AND STORAGE · B6

Cloud storage: mark scheme

20 marks · Cambridge 0478 syllabus 3.3.5, 3.3.6

How to use. One mark per creditworthy point up to the maximum shown. **/** separates alternative words; **//** separates alternative answers. Words in (brackets) are not needed for the mark. Credit any other valid answer that shows the same understanding.

QUESTION	ANSWER	MARKS	GUIDANCE
1(a) 0478 3.3.5	Any two from: Data is stored on (remote) servers // off-site (servers) owned / managed by a third party // provider Accessed (remotely) over the internet // a network Can be accessed from any device with an internet connection	**2**	max 2. Do not accept "stored online" alone for 2 marks.
1(b) 0478 3.3.5	Any one from: Cloud data is stored on physical servers // storage devices (in a data centre) The provider needs physical hardware / drives to store the data	**1**	
2(a) 0478 3.3.5, 3.3.6	Accessed remotely using the internet: True Local data needs internet: False Provider maintains its servers: True Only Wi-Fi: False	**4**	One mark per correct row. A row with both boxes ticked scores 0.
3(a) 0478 3.3.6	Any four from, max two per advantage: Can be accessed from anywhere / any device with an internet connection ... staff working from home can open the bookings Several staff can access / share the same data at once ... all eight staff see the same up-to-date bookings Provider (usually) backs up the data ... bookings are not lost if the office hard drive fails / office computer is damaged Storage capacity can be increased easily ... as the company takes more bookings, it can buy more space Provider maintains the hardware // the company does not need to buy / maintain its own storage ... saves the cost of IT staff / a new drive	**4**	One mark for each advantage, one for its expansion in context. Expansion only credited with its matching advantage.

QUESTION	ANSWER	MARKS	GUIDANCE
3(b) 0478 3.3.6	Any four from, max two per disadvantage: Needs an internet connection ... if the connection fails, staff cannot see bookings Security of the data is controlled by the provider // may be less secure ... customers' personal details could be stolen if the provider is hacked Ongoing cost // subscription fee ... the company must keep paying for the storage Less control over the data ... bookings may be unavailable if the provider has a fault / closes Access may be slow // depends on internet speed ... with a slow connection, staff wait to open bookings	**4**	One mark for each disadvantage, one for its expansion in context. Do not accept "needs Wi-Fi" (any internet connection works).
4(a) 0478 3.3.6	Locally (no mark for choice alone) Any three from: There is no internet connection at the camp ... so cloud storage could not be accessed // data could not be uploaded Local storage does not need an internet connection // can be accessed offline Data can be saved straight away each day Should keep a (second) local backup copy // e.g. external drive	**3**	max 3. If "cloud storage" is chosen, award 0 for the whole part.
4(b) 0478 3.3.6	Any two from: User has (full) control of the data // of its security No ongoing / subscription fee Access is not limited by internet speed // can be faster to access Data is not held by a third party // more privacy	**2**	max 2. Do not accept "works offline" (already given in (a)).

Total: 20 marks