Summative assessment – Answers

## Virtual and cloud environments

Q1. Explain the role of an emulatorin creating a virtual environment.

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| An emulator is a piece of software that attempts to make one computer system behave like a completely different computer system. This means that a user does not need to purchase two different computer systems.  When you use an emulator, you cannot access computer hardware directly; it is done through the emulator. |

Q2. State **two** benefits of cloud storage.

1: Capacity can be expanded or reduced

2: Files can be accessed across the internet from anywhere

Q3. In which cloud service model is the user responsible for applications and data?

* Software as a Service (SaaS)
* Platform as a Service (PaaS)
* Infrastructure as a Service (IaaS)

Q4. State **one** feature that Data as a Service (DaaS)can provide an organisation

Your answer may include one of these: Data science platforms, dashboards, business information tools, data lakes and data warehouses, databases, and/or file systems



Q5. A college wants to implement cloud technology to allow staff and students to access their files, progress data and other college information. Which cloud deployment model would be most suitable for the college?

* Public cloud
* Private cloud
* Hybrid cloud
* Community cloud

Q6. Explain **one** way the new cloud-based system could meet the needs of the students.

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| Your answer may include one of these:  Students are not limited to specific devices, so they can access their files and resources from multiple locations both whilst in college and at home.  Students could work collaboratively on the same documents as fellow students or on documents lecturers have set them for work.  Cloud service providers have systems that provide greater redundancy, meaning there is less likely to be significant periods of downtime where students are unable to access their work or services. |