**Homework Assignment**

**Question 1. (Cloud Models)** Consider the three Cloud delivery models SaaS, PaaS and IaaS. For each of the scenarios below match the scenario to the best model of delivery for the scenario along with a brief explanation.

1. “An Electronic Health Record systems for clinics and doctors”
2. “A web hosting solution for PHP web applications”
3. “A fast lighting storage solutions for gigantic amount of data”

**Question 2: (Cloudonomics)** Which approach (private cloud, public cloud or hybrid cloud) is more economical for each of the following scenarios? Explain with the help of a brief description.

1. An organization that has been in business for a very long time serves about 15,000 users in the day and less than 50 users in the night.
2. An organization that has been in business for a very long serves 2,000 users daily but 1,000,000 during the holiday session.”
3. “A long-running business needs 20,000 computers for a one-time data processing.”

**Question 3:** **(Virtualization)** What type of virtualization (full hardware assisted, para-virtualization, containerization, no virtualization) is feasible for the following scenarios:-

1. A user wants to run a service that requires an unmodified Operating System on an advanced processor.
2. A user wants to run multiple independent applications sharing the same operating system kernel as well as some operating system libraries.
3. A user plans to run just a single application on a single physical server in a way that he gets maximum performance for that application.

**Question 4.** **(Cloud Adoption and Cloud Security)** Research the Cloud Security Hype cycle and rank the following three Cloud Security technologies in the order of maturity. In addition, research the technologies mentioned and briefly discuss what they are.

* Disaster recovery as a service (DRaaS)
* Container Security
* Identity Proofing services