1. Capacity planning is a technology driver in enabling cloud computing.
    - ☐ a.   True.
    - ☑ b.   False.
2. All capital expenditures and Salaries of IT personnel are essential in estimating IT cost when considering cloud migration.
    - ☑ a.   True.
    - ☐ b.   False
3. For IT infrastructure, "On premise" means Physically owned by the organization, but may or may not be situated within the organization.
    - ☐ a.   True.
    - ☑ b.   False.
4. Elasticity means ability to transparently scale in response to loads faced by cloud provider.
    - ☑ a.   True.
    - ☐ b.   False.
5. Apache web server is a virtualised application
    - ☑ a.   True.
    - ☐ b.   False.
6. Docker is a container management software while LXC is a container implementation
    - ☐ a.   True.
    - ☑ b.   False.
7. A virtual machine can run an OS that is different from the underlying OS.
    - ☑ a.   True.
    - ☐ b.   False.
8. In Linux, a process inherits access rights of its parent process. A process created by a regular user is able to elevate its access rights.
    - ☐ a.   True.
    - ☑ b.   False.

<u>Part 2: Please keep the answers short and to the point.</u>

1. Compare and contrast horizontal scaling vs vertical scaling.
2. The perfume company LePew Inc (LPI) has an IT department with a hosting platform specifically for systems used by the company's large marketing department. This platform provides critical, high-availability hosted IT resources and services. However, the IT department has started to receive complaints about the time it takes to start new marketing campaigns, primarily due to how long it takes to provision new servers within this platform. Also, as a result of a recent set of mergers and acquisitions, the consumers of the services hosted by this platform have become more distributed, with service consumers accessing services from a large variety of locations, and with increasingly different types of devices. In response to these complaints, LPI is considering using a cloud-based hosting platform. Which specific characteristics of a cloud will be helpful for LPI to address its problems?
3. Given an example of an overlapping trust boundary in the context of cloud computing.
4. Name four benefits of cloud computing.
5. What does "on-demand usage" mean for a cloud provider.
6. When researching for cloud providers for first assignment, name two aspects that made it easy to decide whether the given cloud provider met your requirements and two aspects that made it difficult. Write a brief statement justifying each choice.
7. Describe the relationship between the host OS and the OS of a container within the host.
8. What are the advantages of hardware support for virtual memory within a virtual machine?
9. Explain the role of Linux "iptables" in setting up multiple containers.
10. Explain the key principles used by a user-mode container to facilitate processes root priviledges within the container.