Part I

1. Discuss within the context of cloud computing IT solutions the complexity of the CA IT environment.
   Based on the background information, the company CA have developed over the years, and it has accumulated a great deal of product portfolio because of various acquisitions. I think that the most stressful pressure is to address their storage and data's complexity issue. It can store their data into the cloud server with the proper management and security. In this way this company also can address their costing problems.

2. Why outsourcing is not a good solution for CA, and why Cloud Computing is believed to be a much better solution? Justify your answer.
   First of all, the data security should be considered, and outsourcing has low level of the security. From my perspective, cloud computing is more like a real-time way rather than the outsourcing which has more slower turnaround time. And one of the cloud service models (Issa)do have the advantage of pay-as-you-go which means this company can save more money based on their own demand. The cloud service also allows they share resources to others (telecommunication companies) via network if they want.

3. Suggest a logical process of actions to determine whether CA should adopt the cloud computing solutions. (Hint: consider some measures for complexity, heterogeneity, ···, CA application architecture, projected cost savings, pilot project, ···)
   They should compare the price based on demand between the outsource companies and cloud computing. They should think about whether their applications' architecture and data's complexity are suitable in cloud service, for example, if they require special personalized customization often, then they should choose outsourcing. Asking suggestions from professionals in the cloud computing field and choosing the most proper providers and products.

Part II

4. Amazon Web Services: PaaS and IaaS/ (private, community, public and hybrid).
5. Microsoft Azure: Saas, PaaS and IaaS/ (private, community, public and hybrid).
6. Google Cloud Platform: Google Computer Engine is IaaS, Google App Engine is PaaS. Google Cloud Platform provides infrastructure as a service, platform as a service. / (private, community, public and hybrid).
7. IBM Cloud: combination of PaaS and IaaS/ (private, community, public and hybrid).
8. VMware: IaaS and SaaS/ (private, community, public and hybrid).
9. Salesforce: both SaaS and PaaS/ (private, community, public and hybrid).
10. Oracle Cloud: IaaS, PaaS, Saas/ (private, community, public and hybrid).
11. SAP: IaaS, PaaS, Saas/ (private, community, public and hybrid).
12. Rackspace: IaaS/ (private, community, public and hybrid).
13. Eucalyptus: IaaS/ (private and hybrid).

14. If you want to develop an application on the Cloud, which Cloud provider would you choose? Why?
    I would like to choose the Oracle Cloud. Because it has all the three cloud-delivery models which is convenient, and it provides resources to individuals, companies and governments. (Private, community, public and hybrid)

15. Explain the difference between cloud-based storage and traditional data centres.
    The traditional data centres heavily rely on the hardware and physical servers. And the resources will be all hosted in the local hardware and service. But the cloud means several hosts spare a part of space which combines with others, and it makes the cloud. Every host can upload and share resources in the cloud.

16. Explain the concept of scaling (horizontal vs vertical) in Cloud Data centres. (Hint: support your analysis by using some examples).
    Horizontal scaling means enlarge the environment by adding the same one and vertical scaling will improve the environment. For example, your computer requires more memory space, the vertical scaling will upgrade or change a better hard disc while the horizontal scaling will add a disc.

Part III

17. Describe the provided GUI after you login.
    After I login in, I enter the AWS Management Console page. I can see services that I visited recently and build a solution (build a virtual machine, build a web app, build using virtual servers and so on). Apart from these, there are links to know about the AWS cloud and how to build your own instances to the cloud.

18. Describe the GUI of your profile.
    There are information about account settings, my contact information, AWS regions, alternate contacts and so on.