Cloud Computing & its Applications (SWE4004)

FAT Model Question Paper

1)   a. Assume that you own the company "ABC" technologies and maintain static resources. Resource requirement to handle the current workloads of your company is highly unstable. Explain what are the possible issues which can encounter with dynamic workloads.   5M

     b.   Assume that your role in a cloud environment is a cloud carrier, identify your importance in the cloud, and explain how you are guaranteeing your services.
                                                                                              5M

2)   a) A company "SCI-HUB" sells its products online. The SCI-HUB company needs to guarantee the HTC and HPC services to its clients. They have two options to upgrade their storage network, one is SAN, and the other one is NAS. As per SCI-HUB client requirement, you suggest one of the networks which best suits this scenario and explains why?   6M

b) Is web technology being the same as web service technology? Justify your answer with a suitable example.   4M

3)   a) A cloud consumer is planning to host his web application in the cloud environment. The consumer wants his/her web application availability is 100% and the response time is very minimal. Assume that, you are the cloud architect, and help the cloud consumer   by   specifying   the   cloud   architecture   which   to   match   his requirements.   6M

b) Distinguish the roles of the monitoring agent and resource agent in the cloud environment.   4M

4)   Suppose you want to design two different data centres for a multinational IT Company to give the cloud services to the customers as well as all employees of that company. Explain and Show with a neat diagram how you can design an efficient data centre?   10M

5)   In a cloud computing, how cloud providers generate client's bill based on their usage. Discuss it with a proper example and diagram.   10M