

Duration: 3hrs

Marks:80

- N.B. :** (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Assume suitable data, if required and state it clearly.

Q1.

- a. Explain the NIST Cloud computing. **05**
- b. Discuss cloud service models **05**
- c. Considering an example of IT software developing company, explain benefits of virtualization for that company. **05**
- d. KVM and XEN are two open source virtualization technology, differentiate them based on type of virtualization, type of environment to be used, design of kernel module, and support for para-virtualization. **05**

Q2.

- a. Explain open stack architecture in detail. **10**
- b. What does the acronym PaaS and IaaS? How does it relate to Cloud computing. **10**

Q3.

- a. Discuss classification or taxonomy of virtualization at different levels. **10**
- b. What is Anything-as-a-service or Everything-as-a-service (XaaS)? Explain in detail. **10**

Q4.

- a. What is the implementation level of Virtualization? **10**
- b. Discuss the risk and challenges associated with cloud security. **10**

Q5.

- a. Explain architecture of Mobile Cloud Computing. What are the benefits and challenges of Mobile Cloud Computing? **10**
- b. Discuss the role of Cloud Computing in Business and customer applications **10**

Q6. Write a note on **20**

- 1. AAA model.
- 2. Cloud backup solution and features.
- 3. Eucalyptus cloud.
- 4. Discuss CIA triad of information system security.