

Duration: 3Hrs

Marks:80

N.B. (1) Question no. 1 is compulsory.

(2) Attempt any three from remaining five questions.

Q1. Solve any four

- a. Compare cloud computing service models **05**
- b. Compare public and private cloud **05**
- c. Explain benefits of Cloud computing for an educational institute. **05**
- d. What is XEN? Discuss the elements of virtualization. **05**
- e. what is hypervisor? What are its functions? List the types of hypervisors with examples. **05**

Q2.

- a. Explain full virtualization and paravirtualization with neat diagrams. **10**
- b. Explain Infrastructure-as-a-Service (SaaS) with suitable examples. **10**

Q3.

- a. List the components of open stack? Explain Open stack architecture with its services and modes of operations. **10**
- b. List and discuss the implementation level of virtualization with neat diagram **10**

Q4.

- a. Explain AAA model with neat diagram and examples **10**
- b. Explain cloud applications in healthcare system. Explain how data analytics is performed on cloud. **10**

Q5.

- a. Explain the architecture of Mobile Cloud Computing along with the Benefits and challenges of Mobile Cloud computing? **10**
- b. Explain Eucalyptus opensource cloud architecture with a neat diagram. **10**

Q6. Write a note on (any 4) **20**

1. Storage services offered by any cloud vendor
2. Cloud security
3. Identity management as service
4. Software as a service
5. Virtualization
6. Cloud migration techniques
