

Total No. of Questions : 12]

SEAT No. :

**P1817**

**[4859]-221**

[Total No. of Pages :3

**B.E. (Computer Engineering)**

**c-CLOUD COMPUTING**

**(Elective-IV) (2008 Course) (410451) (Semester-II)**

*Time : 3 Hours]*

*[Max. Marks :100*

*Instructions to the candidates:*

- 1) Answer three questions from each section.*
- 2) Answer to the two sections should be written in separate answer books.*
- 3) Figures to the right indicate full marks.*
- 4) Assume suitable data, if necessary.*

**SECTION-I**

- Q1)** a) What is demand self service? Describe in detail implementation in cloud computing platforms. [8]
- b) What is cloud computing? Enlist and explain three service models and four deployment models of cloud computing. [8]
- c) Explain in brief how cloud helps reducing capital expenditure. [2]

OR

- Q2)** a) Describe in detail Amazon dynamo infrastructure cloud from user's perspective. [8]
- b) Explain component stack of SaaS, PaaS, IaaS. [8]
- c) Explain network bottleneck challenge in cloud computing. [2]

- Q3)** a) What is multi-entity support? Describe in detail multi-tenancy using single schema and multiple schema approach. [8]
- b) Enlist and explain some of common pitfalls that come with virtualization. [8]

OR

**P.T.O.**

- Q4)** a) Explain in detail server consolidation using virtualization technology. [8]  
b) How the virtualization enterprises an automating infrastructure management with level '0' to level '3'. [8]

- Q5)** a) Compare SOAP and REST paradigm in the context of application deployment on different cloud providers or between different applications & in -house deployment. [8]  
b) Explain the architecture of cloud file system using GFS and HDFS. [8]

OR

- Q6)** a) What is parallel efficiency? Discuss with map-reduce model. [8]  
i) Explain architecture of Google App engines Data store and its underlying technology. [8]

### **SECTION-II**

- Q7)** a) Explain different cloud information security objectives. [6]  
b) Why cloud computing brings new threats. [6]  
c) Define trusted cloud computing and explain cloud service provider risks. [6]

OR

- Q8)** a) What are different testings involves in secure cloud software. [6]  
b) Explain the two functional functions, identity management & access control. Which are required for secure cloud computing. [6]  
c) Define "Disaster" what are alternative services are available in disaster recovery planning. [6]
- Q9)** a) Enlist & explain principal design issues that are to be addressed while designing a GOS-aware distributed ( middleware) architecture for cloud.[8]  
b) Enlist and explain different issues in inter-cloud environments. [8]

OR  
2

**Q10)a)** What si GOS monitoring in a cloud computing? [8]

b) Explain different modules of quality of service GOS aware cloud architecture. [8]

**Q11)a)** Explain Eucalyptus cloud infrastructure with its components. [8]

b) Explain with features & functions of Apache virtual computing Lab. [8]

OR

**Q12)a)** Explain in detail (XcP) Xen Cloud Platform with suitable block diagram. [8]

b) What is open Nebula cloud? Explain main components of Open Nebula. [8]

