

Total No. of Questions : 12]

SEAT No. :

**P863**

**[4659] - 243**

[Total No. of Pages : 3

**B.E (Computer Engineering)**  
**c- CLOUD COMPUTING**  
**(Elective - IV) (2008 Course) (Semester - II)**

*Time : 3 Hours]*

*[Max. Marks : 100*

*Instructions to the candidates:*

- 1) *Answers to the two sections should be written in separate answer books.*
- 2) *Answer any three questions from each section.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right side indicate full marks.*

**SECTION - I**

- Q1)** a) How do you relate cloud computing with Utility computing and Elastic Computing? [6]
- b) Enlist the characteristic of PAAS. [4]
- c) Enlist and explain service models of Cloud Computing. [8]

OR

- Q2)** a) Explain various Deployment models of Cloud Computing. [8]
- b) How the resource provisioning is done and monitored in cloud computing. [6]
- c) Enlist the characteristic of SAAS. [4]

- Q3)** a) Explain how you can develop rich web based application using AJAX in contrast of GET/POST method. [8]
- b) What is data access for enterprise application? Explain with example, how data access control can be implemented. [8]

OR

- Q4)** a) What is Desktop virtualization and application streaming? Explain in detail. [8]
- b) How do you differentiate Multi-tenancy implementation using single schema and multiple schemas? [8]

*P.T.O.*

- Q5)** a) Explain architecture of cloud file systems: GFS AND HDFS. [8]  
b) Discuss with example how to write JOIN operation using MapReduce model. [8]

OR

- Q6)** a) Explain with suitable examples batch processing using MapReduce model. [8]  
b) Explain different Parallel database architectures? Elaborate the difference between row oriented and column oriented storage. [8]

### **SECTION - II**

- Q7)** a) Enlist and Explain Seven complementary principles that support information assurance in cloud computing. [8]  
b) Discuss the necessary requirements for Secure Cloud Software. [8]

OR

- Q8)** a) Classify and explain the Security policy hierarchy that is being maintained while security policy Implementation in cloud. [8]  
b) Enlist the Common Security Testing Techniques and also categorize each in white box, gray box, or black box,. Explain any one technique in detail. [8]

- Q9)** a) Explain the following terms with reference to cloud computing. [8]  
i) Sky computing.  
ii) Load Balancing.  
b) Enlist and Explain the different category which can be used for resource optimization before opting for cloud migration. [8]

OR

- Q10)**a) What is Data Migration and which type of best practices should be used to protect data during a migration. [8]  
b) Enlist and Explain the principal design issues that are to be addressed while designing a QoS-aware distributed (middleware) architecture for cloud . [8]

- Q11)a)** What is Nimbus? Discuss in detail the cloudinit.d and context broker. **[10]**
- b) Explain various components within Enomal Elastic cloud computing platform. **[8]**

OR

- Q12)a)** Describe performance evaluation functions and features of cloud platforms. **[10]**
- b) Explain different features and functions of Virtual Computing Lab. **[8]**

