SEAT No. :

**P2808**

**[5154]-190**

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## B.E. (Computer Engineering)
## CLOUD COMPUTING
## (2008 Pattern) (Elective - IV) (410451C) (Semester - II)

*Time : 3 Hours]* *[Max. Marks : 100*

*Instructions to the candidates:*
1) *Answer THREE questions from each section.*
2) *Answers to the TWO sections should be written in SEPRATE answer books.*
3) *Figures to the right indicate full marks.*
4) *Draw neat diagram wherever necessary.*
5) *Make suitable assumptions wherever necessary.*

### SECTION -I

**Q1)** a) How cloud computing services uses various component? Describe in detail types of clouds. **[8]**

b) Compare and contrast between SaaS, Paas, IaaS in accordance with economies of scale. **[8]**

c) What is Multi Tennacy? **[2]**

OR

**Q2)** a) Incline and explain with examples types of cloud computing. **[8]**

b) Explain the services provided by the Microsoft Azure. **[8]**

c) Define utility Computing. **[2]**

**Q3)** a) What is difference between process virtual machines, host VMMs and native VMMs. **[8]**

b) Compare and contrast between SOAP and REST. **[8]**

OR

**Q4)** a) What is role of web services? How asynchronous 'rich' interfaces applied for deployment of cloud services? **[8]**

b) Describe with example Mashups. **[8]**

**Q5)** a) Explain in detail architecture of cloud file systems? **[8]**

b) Explain how data organization in big tables are stored on distributed file systems such as GFS and HDFS. **[8]**

OR

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**Q6) a)** Explain scalable parallel implementation with suitable example of Mapreduce Model. **[8]**

b) How amazon dynamo works for data storage in cloud file systems? **[8]**

## SECTION -II

**Q7) a)** Describe security management levels with suitable diagram. **[10]**

b) Write in brief access control in PaaS. **[8]**

OR

**Q8) a)** What are different key privacy in cloud environment. **[8]**

b) Explain fundamental functions: identity management, access control for secure cloud computing. **[10]**

**Q9) a)** Explain in detail load computation across multiple implementation. Describe in brief virtual and horizontal load distribution **[8]**

b) What are the temporal requirement for QOS? Describe in aggregation of work flow in load distribution. **[8]**

OR

**Q10) a)** Compare different issues in inter-cloud environments. **[8]**

b) Explain in detail how QOS monitoring deployed in cloud computing? **[8]**

**Q11)a)** Explain in detail performance evaluation feature of Apache Virtual platform. **[8]**

b) Explain conceptual representation of Eucalyptus Cloud with its components. **[8]**

OR

**Q12)a)** Write a short note on Xen cloud platform **[8]**

b) Describe performance evaluation Features and functions of Enomaly Elastic Computing cloud platforms. **[8]**

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