

Total No. of Questions: 6

Total No. of Printed Pages:3

Enrollment No.....



Faculty of Engineering
End Sem (Even) Examination May-2019
CS3EL10 Cloud Computing
Programme: B.Tech. Branch/Specialisation: CSE

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. _____ describes a cloud service that can only be accessed by a limited amount of people. 1
(a) Data center (b) Private cloud
(c) Virtualization (d) Public cloud
- ii. Which of the following can be considered PaaS offering? 1
(a) Google Maps (b) Gmail
(c) Google Earth (d) Google play store
- iii. Which of the following type of virtualization is also characteristic of cloud computing? 1
(a) Storage (b) Application
(c) CPU (d) All of these
- iv. An operating system running on a Type _____ VM is a full virtualization. 1
(a) 1 (b) 2 (c) 3 (d) All of these
- v. _____ offering provides the tools and development environment to deploy applications on another vendor's application. 1
(a) PaaS (b) IaaS (c) CaaS (d) All of these
- vi. The technology used to distribute service requests to resources is referred to as: 1
(a) Load performing (b) Load scheduling
(c) Load balancing (d) None of these

P.T.O.

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- vii. To find the best security-as-a-service offering for your organization: **1**
 (a) Ask the vendor what they recommend
 (b) Assess your requirements, do a risk assessment and a cost/benefit analysis of the options
 (c) Find the cheapest monthly option and use whatever is offered with that service
 (d) Ask your peers and do exactly what they're doing
- viii. Using a cloud provider for security services is always: **1**
 (a) Cheaper than doing it on-premise
 (b) More secure than doing it on-premise
 (c) The right thing to do
 (d) A way to impress your boss
- ix. _____ serves as a PaaS vendor within Google App Engine system. **1**
 (a) Google (b) Amazon (c) Microsoft (d) Azure
- x. Google Docs is a type of cloud computing. **1**
 (a) True (b) False
- Q.2 Attempt any two:
- i. What are the five essential characteristics of Cloud Computing as per NIST? Explain each of them. **5**
- ii. How to predict protein structure in cloud application? Explain with diagram. **5**
- iii. Define cloud deployment model with suitable diagram and working. **5**
- Q.3 i. What is the need of Compute Virtualization? Differentiate between a virtualized and non-virtualized machine. **4**
- ii. How to achieve para-virtualization. List some advantages and disadvantages of para-virtualization. **6**
- OR iii. Write short note on: **6**
 (a) Capex (b) Opex,

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- Q.4 i. What is BaaS in cloud? How ease of recovery, affordability services are useful in cloud environment. **4**
- ii. Define SLA lifecycle with suitable example and diagram. **6**
- OR iii. What are DRaaS services in cloud? Explain types of DRaaS. **6**
- Q.5 i. Define in short: **4**
 (a) Identity management (b) Access control
- ii. List various security issues in Cloud. Explain Each of them with diagram and example. **6**
- OR iii. Define at least six ways to secure virtual machine and data from outside world. **6**
- Q.6 Write short note on any two:
- i. Google app engine **5**
- ii. Xen hypervisor **5**
- iii. Open stack. **5**

Marking Scheme

CS3EL10 Cloud Computing

- Q.1 i. _____ describes a cloud service that can only be accessed by a limited amount of people. **1**
(b) Private cloud
- ii. Which of the following can be considered PaaS offering? **1**
(a) Google Maps
- iii. Which of the following type of virtualization is also characteristic of cloud computing? **1**
(d) All of these
- iv. An operating system running on a Type _____ VM is a full virtualization. **1**
(a) 1
- v. _____ offering provides the tools and development environment to deploy applications on another vendor's application. **1**
(b) IaaS
- vi. The technology used to distribute service requests to resources is referred to as: **1**
(c) Load balancing
- vii. To find the best security-as-a-service offering for your organization: **1**
(b) Assess your requirements, do a risk assessment and a cost/benefit analysis of the options
- viii. Using a cloud provider for security services is always: **1**
(b) More secure than doing it on-premise
- ix. _____ serves as a PaaS vendor within Google App Engine system. **1**
(a) Google
- x. Google Docs is a type of cloud computing. **1**
(a) True

- Q.2 Attempt any two:
- i. Five essential characteristics of Cloud Computing as per NIST **5**
2 marks
Explanation 3 marks
- ii. To predict protein structure in cloud application with diagram **5**
- iii. Cloud deployment model with diagram 2 marks **5**
Working. 3 marks

- Q.3 i. Need of Compute Virtualization 2 marks **4**
Differentiate B/w a virtualized and non-virtualized machine
2 marks
- ii. To achieve para-virtualization 2 marks **6**
Advantages of para-virtualization 2 marks
Disadvantages of para-virtualization. 2 marks
- OR iii. Write short note on: **6**
(a) Capex 3 marks
(b) Opex, 3 marks
- Q.4 i. BaaS in cloud 1.5 marks **4**
Ease of recovery, affordability services are useful in cloud environment 2.5 marks.
- ii. SLA lifecycle with suitable example 3 marks **6**
Diagram. 3 marks
- OR iii. DRaaS services in cloud 3 marks **6**
Types of DRaaS. 3 marks
- Q.5 i. Define in short: **4**
(a) Identity management 2 marks
(b) Access control 2 marks
- ii. Security issues in Cloud 3 marks **6**
Explanation with diagram and example. 3 marks
- OR iii. At least six ways to **6**
Secure virtual machine 3 marks
data from outside world 3 marks
- Q.6 Write short note on any two:
- i. Google app engine **5**
- ii. Xen hypervisor **5**
- iii. Open stack. **5**
