

(i) Printed Pages : 2

Roll No.

(ii) Questions : 7

Sub. Code :

6	8	6	4
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Exam. Code :

9	2	5
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B.Engg. (Information Technology) 7th Semester
1125

CLOUD COMPUTING

Paper-IT-734

Time Allowed : Three Hours]

[Maximum Marks : 50

Note :- Attempt **five** questions. Q. No. 1 is compulsory. Attempt **two** questions each from Part-A and Part-B.

1. Define the following :

- (a) Hyper jacking
- (b) Vendor Lock-in
- (c) Multi-tenancy
- (d) CIA Triad
- (e) Machine Image.

10

PART-A

2. How cloud computing would help an organization in establishing its infrastructure and services ? Also explain Cloud Computing limitations.

10

3. What are the different types of hypervisors and their role in achieving different types of virtualization in cloud computing ? Also explain OS based Virtualization.

10

6864/BEG-32838

[Turn over

$$y(n) = -0.1y(n-1) + 0.7x(n) -$$

b) Explain the architecture of ADSP 21XX family of pro

Q.6a) What are the two main methods of IIR filter design? A

4. Comment on the various hardware and infrastructure requirements for accessing the cloud and the various access mechanisms.

PART-B

5. What do you mean by Identity Management in cloud ? Elaborate the key mechanisms involved in securing the data stored on the cloud. 10
6. How event Management is possible with cloud computing ? Explain cloud collaboration. 10
7. Why there is a need for standardization in cloud storage ? Explain Cloud Data Management Interface (CDMI). 10

Exam. Code: 0925
Sub. Code: 6866

1128
B.E. (Information Technology)
Seventh Semester
Elective – II
ITE-744: Cloud Computing

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) What are workload patterns?
- b) Give the definition of Grid and Cloud.
- c) What is the role of Hypervisors in Virtualization Hardware?
- d) What is Server Virtualization?"
- e) List out any four current issues in cloud computing leading to future research directions. (5x2)

UNIT -I

- II. a) What is the role of Virtualization in Cloud Computing? Give the architecture of Virtualization. (6,4)
- b) What are the benefits of virtual machines? (10)
- III. Write down the short note on working with Public Cloud.
- IV. a) Give the implementing steps of private cloud on Eucalyptus. (5,5)
- b) Write down the characteristics of IaaS, PaaS and SaaS?

UNIT -II

- V. a) What are the challenges in cloud computing in terms of application security and Network security? (5,5)
- b) Explain the Security reference Model.
- VI. a) What are the challenges in managing heterogeneous clouds? (5,5)
- b) What are the benefits of Multi-Cloud Management Systems?
- VII. Write down the short note on future directions in Cloud Computing. (10)

x-x-x

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B.Engg. (Information Technology) 7th Semester
1125

CLOUD COMPUTING

Paper-IT-734

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1. Define the following :

- (a) Hyper jacking
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PART-A

2. How cloud computing would help an organization in establishing its infrastructure and services ? Also explain Cloud Computing limitations.

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3. What are the different types of hypervisors and their role in achieving different types of virtualization in cloud computing ? Also explain OS based Virtualization.

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6864/BEG-32838

[Turn over

$$y(n) = -0.1y(n-1) + 0.7x(n) -$$

b) Explain the architecture of ADSP 21XX family of pro

Q.6a) What are the two main methods of IIR filter design? A

4. Comment on the various hardware and infrastructure requirements for accessing the cloud and the various access mechanisms.

PART-B

5. What do you mean by Identity Management in cloud ? Elaborate the key mechanisms involved in securing the data stored on the cloud. 10
6. How event Management is possible with cloud computing ? Explain cloud collaboration. 10
7. Why there is a need for standardization in cloud storage ? Explain Cloud Data Management Interface (CDMI). 10

Exam. Code: 0925
Sub. Code: 6866

1128
B.E. (Information Technology)
Seventh Semester
Elective – II
ITE-744: Cloud Computing

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) What are workload patterns?
- b) Give the definition of Grid and Cloud.
- c) What is the role of Hypervisors in Virtualization Hardware?
- d) What is Server Virtualization?"
- e) List out any four current issues in cloud computing leading to future research directions. (5x2)

UNIT -I

- II. a) What is the role of Virtualization in Cloud Computing? Give the architecture of Virtualization. (6,4)
- b) What are the benefits of virtual machines? (10)
- III. Write down the short note on working with Public Cloud.
- IV. a) Give the implementing steps of private cloud on Eucalyptus. (5,5)
- b) Write down the characteristics of IaaS, PaaS and SaaS?

UNIT -II

- V. a) What are the challenges in cloud computing in terms of application security and Network security? (5,5)
- b) Explain the Security reference Model.
- VI. a) What are the challenges in managing heterogeneous clouds? (5,5)
- b) What are the benefits of Multi-Cloud Management Systems?
- VII. Write down the short note on future directions in Cloud Computing. (10)

x-x-x

1127
B.E. (Information Technology)
Seventh Semester
Elective – II
ITE-744: Cloud Computing

Time allowed: 3 Hours

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Section.

Max. Marks: 50

x-x-x

Note: All questions in this Section are compulsory. Each question carries 2 marks.

- I
- (a) Differentiate public, private and hybrid Cloud. 2
 - (b) What are the similarities and differences of cloud computing with multiprogramming? 2
 - (c) What is Virtual Private Cloud? 2
 - (d) What is Multitenancy? 2
 - (e) Give brief definition of IaaS, PaaS and SaaS. 2

Section-A

- II
- (a) What are the Benefits and Challenges of cloud computing?
 - (b) What are the selecting criteria for cloud deployment modes? What is the function of Application Programming Interfaces (API) in cloud system? 5+5
- III
- (a) What are Virtualization techniques in cloud computing? What is the role of these techniques?
 - (b) What are the Private cloud building blocks? 5+5
- IV
- (a) Write down the implementing steps of private cloud on cloud stack/Open Stack.
 - (b) Write down the implementing steps of public cloud on Windows Azure/IBM or Rackspace. 5+5

Section- B

- (a) Explain the security concerns in Traditional IT.
- (b) Explain the Security reference Model. 5+5

What is the role of Cloud Computing in business? Give the brief introduction of business intelligence on cloud and Big Data Analytics on cloud.

10

Exam.Code:0919
Sub. Code: 7916

1127
B.E. (Computer Science and Engineering)
Seventh Semester
Elective – III
CS-705C: Cloud Computing

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

1.	a.	Define elasticity and multi-tenancy with respect to cloud computing.	2
	b.	What are Type-I and Type-II hypervisors?	2
	c.	What do you mean by virtual storage containers?	2
	d.	Why should cloud service providers be more concerned about appropriate disposal of customer data?	2
	e.	What is the motivation behind the concept of mobile cloud computing?	2
UNIT I			
2.	a	Elaborate the different types of Cloud Service Models.	5
	b	Despite the success and popularity of cloud computing paradigm, a significant number of challenges are inherent to this model of computing. What are these challenges?	5
3.	a	Differentiate between Full-virtualization and Para-virtualization.	5
	b	Explain Network Virtualization and Memory Virtualization.	5
4.	a	What are the various issues in providing storage as a service?	5
	b	Differentiate between NAS and SAN.	5
UNIT II			
5.	a	What are various data security concerns in Cloud Computing?	5
	b	Discuss the utilization of cloud in Big Data Analytics.	5
6.	a	Discuss some of the ways to achieve identity management in cloud computing.	5
	b	What are the various challenges in offloading data from mobile devices to cloud servers?	5
7.	a	Discuss various features of Amazon S3 services.	5
	b	Write a short note on BigTable and BigQuery.	5

x-x-x