



APJ ABDULKALAM TECHNOLOGICAL UNIVERSITY
08 PALAKKAD CLUSTER

Q. P. Code : CSE0821252A-I

(Pages: 2)

Name:

Reg. No:

SECOND SEMESTER M.TECH. DEGREE EXAMINATION JULY 2021

Branch: Computer Science and Engineering Specialization: Computer Science and Engineering

08CS6052(A) CLOUD COMPUTING

(Common to CSE)

Time: 2 hour 15 minutes

Max. Marks: 60

Answer all six questions.

Modules 1 to 6: Part 'a' of each question is compulsory and answer either part 'b' or part 'c' of each question.

Q.no.	Module 1	Marks
1.a	Give an application of cloud bursting.	3

Answer b or c

b	With the help of a reference architecture analyse the roles of various actors in a cloud architecture.	6
c	Differentiate between SaaS, PaaS and IaaS	6

Q.no.	Module 2	Marks
2.a	What type of paging technology would one use for memory virtualization?	3

Answer b or c

b	Give the applications of following tools: i) OpenVZ (ii) Xen (iii) Vmware ESX	6
c	Explain about levels of Virtualization. Which level of virtualization is suited for hosting applications? Substantiate your answer	6

Q.no.	Module 3	Marks
3.a	Explain the important resource provisioning schemes in cloud.	3

Answer b or c

- b** Explain a generic cloud architecture with respect to layering of services, security, shrinking/leasing of resources. **6**
- c** Explain the six open challenges in cloud architecture development. **6**

Q.no. Module 4 Marks

- 4.a** Compare and contrast important data analysis languages. **3**

Answer b or c

- b** Explain twister as an iterative map-reduce framework. **6**
- c** Explain how a map-reduce job is run by a Hadoop cluster and explain the components involved **6**

Q.no. Module 5 Marks

- 5.a** What is BigTable, Chubby? **4**

Answer b or c

- b** Explain the architecture of Google File system (GFS) **8**
- c** Write notes on Amazon EC2, Amazon S3 and Amazon EBS with respect to programming support and architecture. **8**

Q.no. Module 6 Marks

- 6.a** Write notes on virtual machine security. **4**

Answer b or c

- b** Explain the important baseline security measures for SaaS **8**
- c** Write notes on Security Architecture Design, Security Monitoring and Application Security in Cloud. **8**