

**APJ ABDULKALAM TECHNOLOGICAL UNIVERSITY
08 PALAKKAD CLUSTER**

Q. P. code : 2EA-17-1

(pages: 2)

Name:

Reg No:

SECOND SEMESTER M.TECH. DEGREE EXAMINATION April/May 2017

**Computer Science and Engineering
08 CS 6052(A)CLOUD COMPUTING**

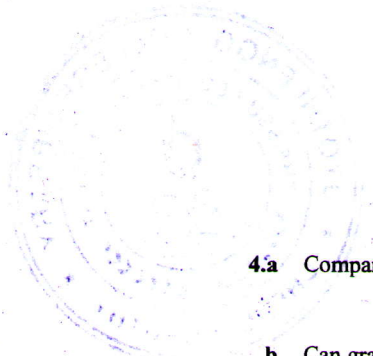
Time:3 hours

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	Is disaster recovery in cloud possible using cloning of VMs? When is live migration of VMs used?	3
Answer b or c		
b	What type of resource provisioning method will you use for a website which is moderately loaded but may experience peak demand during certain months of the year? Substantiate your answer.	6
c	Analyse data lock-in, standardization and licensing problems with respect to cloud services.	6
Q.no.	Module 4	Marks



- 4.a Compare and contrast important data analysis languages. 3
- Answer b or c**
- b Can graph data structure be used for data analytics? Substantiate your answer. 6
- c Is it possible to run a map-reduce job in Hadoop without tasktracker? Substantiate your answer. 6

Q.no.	Module 5	Marks
5.a	Why is leasing important in GFS mutations?	4
Answer b or c		
b	Why is master in Google File system(GFS) a single point of failure? Withstanding that, what is its role in GFS?	8
c	Substantiate how BigTable's data model is suited for Google's search application?	8

Q.no.	Module 6	Marks
6.a	What can be some measures to ensure virtual machine security?	4
Answer b or c		
b	What can be some baseline security measures for SaaS?	8
c	Why is secure software development lifecycle important in cloud (SecSDLC)? Analyse.	8