

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

08 PALAKKAD CLUSTER

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

(pages: 2)

Name:

Reg No:



SECOND SEMESTER M.TECH. DEGREE EXAMINATION APRIL/MAY 2017

08 CS 6052(A): CLOUD COMPUTING

Time: 3 hours

Max. Marks: 60

Answer all six questions. Part 'a' of each question is compulsory.

Answer either part 'b' or part 'c' of each question

Q.no.	Module 1	Marks
1.a	Define cloud computing. Assume your company wants to launch an e-commerce website, which cloud services and deployment models will you consider for the website?	3
	Answer b or c	
b	With the help of a neat diagram, explain NIST cloud reference model.	6
c	Briefly explain about your mini-project. Discuss the steps to convert it into a cloud application.	6
Q.no.	Module 2	Marks
2.a	Compare dockers virtual machine. Assume that KTU has uploaded a new Ubuntu docker image with id "fea621e1b439" in the docker hub. Write down the command for running the image on your local machine.	3
	Answer b or c	
b	Explain about the various implementation levels of virtualization.	6
c	Discuss in detail about the hardware support for virtualization in the intel x86 processor.	6
Q.no.	Module 3	Marks
3.a	Briefly explain about the resource provisioning methods in cloud.	3
	Answer b or c	
b	With the help of a neat diagram, explain InterCloud Architecture.	6
c	Explain GAE architecture in detail.	6
Q.no.	Module 4	Marks
4.a	What are the key components of YARN?	3
	Answer b or c	
b	List out the steps to run a MapReduce job on a Hadoop cluster.	6
c	Discuss in detail about the data and control flow in MapReduce.	6

Q.no.

Module 5

Marks

5.a Assume that KTU has built a webapp in GO programming language with appid "welcome-ktu" in a folder named 'welcome'. List out the commands for the following:

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- (i) To compile the webapp locally & start the development webserver
- (ii) To deploy the webapp to the Google App Engine
- (iii) URL to access the webapp locally
- (iv) URL to access the webapp globally

Answer b or c

b Design & build a private cloud for your college.

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c Discuss in detail about Amazon EC2 execution environment.

8

Q.no.

Module 6

Marks

6.a What is Identity and Access Management?

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Answer b or c

b How does SAML-SSO prevent man-in-the middle & replay attacks in cloud?

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c Explain how data is secured in cloud?

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