

University of Mumbai

Examination June 2021

Examinations Commencing from 1st June 2021

Program: **Information Technology**

Curriculum Scheme: Rev2016

Examination: TE Semester VI

Course Code: ITC603 and Course Name: Cloud Computing and Services

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	The attempt to categorize the cloud network based on four factors namely location, Ownership, Security, Sourcing has lead to which model?
Option A:	Cloud NIST model
Option B:	Deployment Model
Option C:	Cloud Cube Model
Option D:	Service Models
2.	If the application, data, middleware and runtime executions are managed by the customer then you have purchased a _____ as a service in cloud .
Option A:	Software as a Service
Option B:	Data as a Service
Option C:	Platform as a Service
Option D:	Infrastructure as a Service
3.	In the Cloud Architecture a layer that provides the basic software management for the physical servers and can be implemented as an operating system, hypervisor and virtual machine monitor and/or clustering middleware.
Option A:	Software Kernel
Option B:	Cloud Application Layer
Option C:	Cloud Software Infrastructure Layer
Option D:	Hardware and Firmware
4.	Which of the following is not the advantage of Virtualization?
Option A:	Cost Reduction
Option B:	Efficient resource utilization
Option C:	Increased flexibility
Option D:	Upfront Investments
5.	Which of the following is very poor in ISA Level virtualization?
Option A:	performance
Option B:	application flexibility
Option C:	implementation complexity
Option D:	application isolation
6.	Which technique is used to optimize performance of virtual memory ?
Option A:	Accumulator
Option B:	Loader

Option C:	Translation Look aside Buffer
Option D:	Emulator
7.	How can confidentiality of information be achieved?
Option A:	By ensuring enough resources to make information available for all users
Option B:	By preventing unauthorized changes
Option C:	By regularly backing up the information
Option D:	By restricting access to information
8.	Which three OpenStack components does Nova need to function?
Option A:	Neutron, Horizon and Glance
Option B:	Glance, Keystone and Horizon
Option C:	Keystone, Glance and Neutron
Option D:	Cinder, Swift and Kolla
9.	What is Google App Engine (GAE) for?
Option A:	GAE is for detecting malicious apps
Option B:	GAE is for running web applications on Google infrastructure
Option C:	GAE replaces the modern computer
Option D:	GAE is a system to develop hardware interfaces
10.	Challenges in Mobile Cloud Computing are
Option A:	High bandwidth, Heterogeneity
Option B:	Service availability, Homogeneity
Option C:	Low bandwidth, Heterogeneity
Option D:	High bandwidth, Service unavailability
11.	_____ is the medium for storing objects in S3
Option A:	Vault
Option B:	SSD
Option C:	Bucket
Option D:	HDD
12.	An Elastic IP Addresses (EIP) is an _____that you can assign to your account from the pool and can also return it to the pool.
Option A:	static private IP address
Option B:	static public IP address
Option C:	dynamic public IP address
Option D:	dynamic private IP address
13.	_____ is very low-price online file storage web service which offer secure, flexible and durable storage for online data backup and archiving.
Option A:	Amazon Glacier
Option B:	Amazon S3
Option C:	Amazon EBS
Option D:	Amazon ELB
14.	CSG acts as a bridge between
Option A:	Local applications and cloud-based storage
Option B:	Remote applications and cloud-based storage

Option C:	Local applications and local storage
Option D:	Remote applications and remote storage
15.	Keystone does not provide
Option A:	Public/private key management
Option B:	Token and password-based authentication
Option C:	RBAC based authorization
Option D:	Secure protocols
16.	Which of the following is not a function of SWIFT
Option A:	Provisioning and deploying VMs
Option B:	Storing objects securely
Option C:	Backup and archival
Option D:	Extreme scalability
17.	AWS console is analogous to _____ service of Openstack
Option A:	Neutron
Option B:	Nova
Option C:	Horizon
Option D:	Glance
18.	The CDMI standard is developed by
Option A:	ISOs Storage Web Group
Option B:	SNIA Cloud Storage Technical Web Group
Option C:	NISTs Storage Technical Web Group
Option D:	IEEE Cloud Storage Web Group
19.	When is cloud recovery possible
Option A:	when only source is in cloud
Option B:	when only recovery site is in cloud
Option C:	when both source and recovery sites are in cloud
Option D:	when both source and recovery sites are not in cloud
20.	Virtual storage and virtual machines are provided by
Option A:	PaaS
Option B:	IaaS
Option C:	CaaS
Option D:	SaaS

Q2	Solve any Two Questions out of Three	10 marks each
A	Explain the NIST cloud model.	
B	Explain Xen virtualization with the help of its architecture.	
C	Compare and contrast between AWS S3, EBS and Glaciers.	

Q3.	Solve any Two Questions out of Three	10 marks each
A	Write a Short note on Cloud data management interface.	
B	Explain Google File System in detail.	
C	Explain Disaster recovery as a service in detail.	