UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2020

Course: Cloud Architecture and Deployment Models   Semester: VIII
Program: BT-CSE-Spz-ECRA   Time   : 03 hrs.
Course Code: CSEG 379   Max. Marks: 100

Instructions: Attempt each question with suitable representation of concepts.

	SECTION A		
S. No.		**Marks**	**CO**
Q 1	Which of the following architectural standards is working with cloud computing industry? a) Service-oriented architecture b) Standardized web services c) Web-application frameworks d) All of the mentioned	**2**	**CO1**
Q 2	Cloud computing is also a good option when the cost of infrastructure and management is _____. a) Low b) High c) Moderate d) None of the mentioned	**2**	**CO1**
Q 3	_____ refers to the location and management of the cloud's infrastructure. a) Service b) Deployment c) Application d) None of the mentioned	**2**	**CO1**
Q 4	_____ provides virtual machines, virtual storage, virtual infrastructure, and other hardware assets. a) IaaS b) SaaS c) PaaS d) All of the mentioned	**2**	**CO2**
Q 5	Which of the following is the IaaS service provider? a) EC1 b) EC2	**2**	**CO2**

	c) EC10 d) Hybrid		

Q 6	Which of the following is the fundamental unit of virtualized client in an IaaS deployment?
	   a) Workunit
	   b) Workspace
	   c) Workload
	   d) All of the mentioned
		2	**CO2**

Q 7	Compromising a user's session for exploiting the user's data and do malicious activities or misuse user's credentials is called _____.
	   a) Session Hijacking
	   b) Session Fixation
	   c) Cookie stuffing
	   d) Session Spying
		2	**CO3**

Q 8	All cloud computing applications suffer from the inherent _____ that is intrinsic in their WAN connectivity.
	   a) Propagation
	   b) Latency
	   c) Noise
	   d) All of the mentioned
		2	**CO3**

Q 9	Security methods such as private encryption, VLANs and firewalls comes under _____ subject area.
	   a) Accounting Management
	   b) Compliance
	   c) Data Privacy
	   d) All of the mentioned
		2	**CO3**

Q 10	Which of the following resource(s) represents the bottleneck in the current system that limits the system's performance?
	   a) ROM
	   b) Resource ceiling
	   c) Resource Parameters
	   d) All of the mentioned
		2	**CO3**

Q 11	Which of the following is done by Identity management?
	   a) Controlling access to data in the cloud
	   b) Maintaining user roles
	   c) Preventing unauthorized uses
	   d) All of the mentioned
		2	**CO3**

Q 12	_____ means the protection of data from modification by unknown users.
	   a) Confidentiality
	   b) Integrity
		2	**CO3**

	c) Authentication d) Non-repudiation		
Q 13	Cryptanalysis is used _____ a) to find some insecurity in a cryptographic scheme b) to increase the speed c) to encrypt the data d) to make new ciphers	2	CO3
Q 14	_____ is the practice and precautions taken to protect valuable information from unauthorised access, recording, disclosure or destruction. a) Network Security b) Database Security c) Information Security d) Physical Security	2	CO4
Q 15	The technology used to distribute service requests to resources is referred to as _____. a) Load analysis b) Load scheduling c) Load balancing d) All of the mentioned	2	CO4
Q 16	The _____ cloud infrastructure is operated for the exclusive use of an organization. a) Public b) Private c) Hybrid d) Community	2	CO4
Q 17	Applications such as a Web server or database server that can run on a virtual machine image are referred to as _____ a) Virtual Server b) Virtual Appliances c) Machine Imaging d) All of the mentioned	2	CO4
Q 18	Which of the following is a virtual machine technology now owned by Oracle that can run various operating systems? a) Vmachines b) VirtualBox c) VBox d) None of the mentioned	2	CO4
Q 19	Which of the following is based on the IETF Session Initiation Protocol? a) WSDL b) SIMPLE	2	CO4

	c) SOAP d) All of the mentioned		

Q 20	Which of the following is Type 1 Hypervisor?
	    a) Wind River Simics
	    b) Virtual Server 2005 R2
	    c) KVM
	    d) LynxSecure
		2	CO4

Q 21	Which of the following model type is not trusted in terms of security?
	    a) Public
	    b) Private
	    c) Hybrid
	    d) None of the mentioned
		2	CO4

Q 22	Which of the following will be the host operating system for Windows Server?
	    a) VirtualLogix VLX
	    b) Microsoft Hyper-V
	    c) Xen
	    d) All of the mentioned
		2	CO4

Q 23	What is the primary OpenStack component you use to deploy containers?
	    a) Keystone
	    b) Karbor
	    c) Kolla
	    d) Kuryr
		2	CO5

Q 24	How would you add the user apressuser with a Member role to the apress project?
	
	    a) openstack role add –project apress –user apressuser _member_
	    b) openstack role add –project apress –user apressuser member
	    c) openstack role add –project apress –user _member_ apressuser
	    d) openstack role add –project apress –user member apressuser
		2	CO5

Q 25	Which three OpenStack components does Nova need to function?
	    a) Neutron, Horizon and Glance
	    b) Glance, Keystone and Horizon
	    c) Keystone, Glance and Neutron
	    d) Cinder, Swift and Kolla
		2	CO5

Q 26	Which component serves as a dashboard for users to manage OpenStack compute, storage and networking services?
	    a) Designate
	    b) Horizon
	    c) Glance
	    d) Searchlight
		2	CO5

Q 27	Which OpenStack component provides identity services?	2	CO5

	a) Trove b) Ceilometer c) Dragonflow d) Keystone		
Q 28	What kind of service does Glance provide? a) Network monitoring b) Image management c) Disaster recovery d) Container orchestration	**2**	**CO5**
Q 29	What core function does Neutron perform? a) Networking b) Compute c) Storage d) All of the above	**2**	**CO5**
Q 30	Which OpenStack component provides database as a service? a) Trove b) Manila c) Storlets d) Kuryr	**2**	**CO5**
SECTION B			
Q 31	Suppose a company A decides to setup a cloud to deliver Software-as-a-Service to its clients from a remote location. Answer the following. a) Analyse the security risks that a customer should to be careful about. b) Discuss the kind of infrastructural setup that will be required to set up a cloud. c) Interpret the kind of billing model, used by the cloud service provider for payment purpose.	**10**	**CO2**
Q 32	Does cloud computing offer new opportunities for users and developers? Justify your answer in detail.	**10**	**CO3**
Q 33	Illustrate different types of hypervisors with suitable examples. Also enlist the advantages of each. **OR** Discuss the essential prerequisites before using a cloud computing platform.	**10**	**CO4**
Q 34	Define Identity Service in OpenStack. Differentiate between 'user', 'role', and 'tenant'. **OR**	**10**	**CO5**

| | Describe bare-metal node and its components. How to remove a network interface from the bare-metal node? | | |