Printed i	Page:- 04 Sur	oject Code:- ACSU4U1				
	Rol	I. No:				
	NOIDA INSTITUTE OF ENGINEERING AND	TECHNOLOGY, GREATER NOIDA				
	(An Autonomous Institute Affilia					
	B.Tech					
	SEM: IV - THEORY EXAMINA	TION - (2023 - 2024)				
	Subject: Cloud Computi	ng Architecture				
Time: 3	3 Hours	Max. Marks: 100				
General	l Instructions:					
IMP: Veri	rify that you have received the question paper	with the correct course, code, branch etc.				
1. This Q	Question paper comprises of three Sections	s -A, B, & C. It consists of Multiple Choice				
	ns (MCQ's) & Subjective type questions.					
	mum marks for each question are indicated on					
	rate your answers with neat sketches wherever	necessary.				
	ne suitable data if necessary.					
-	rably, write the answers in sequential order. heet should be left blank. Any written n	natarial after a blank sheet will not be				
	ed/checked.	idiendi diter di bidirk sheet will not be				
cvaraacca	SECTION A	20				
		20				
1. Attem	npt all parts:-					
1-a.		ne type of computers whose target is 1				
	to work as a same unit. (CO1)					
	(a) Cluster Computer					
	(b) Grid computer					
	(c) common computer					
	(d) none of the above					
1-b.	The technology used to distribute service	requests to resources is referred to 1				
	as (CO1)	•				
	(a) load performing					
	(b) load balancing					
	(c) load scheduling					
	(d) all of the mentioned					
1-c.	SOAP is a: (CO2)	1				
		·				
	(a) Protocol					

	(b) Architecture	
	(c) Protocol and Architecture	
	(d) None of the above	
1-d.	are developed, maintained and owned by multiple stakeholders in	,
	SOA. (CO2)	
	(a) Web page	
	(b) Web application	
	(c) Messages	
	(d) Services	
1-e.	Select the statement which is true about Regions. (CO3)	,
	(a) Physical location with single availability zone	
	(b) All regions are located in one geographical location	
	(c) Physical location of your computers	
	(d) Each region is located separate geographical area	
1-f.	IBM CCRA is driven by: (CO3)	
	(a) Functional requirement	
	(b) Non- functional requrement	
	(c) Both functional and non- functional requrement	
	(d) None of the mentioned	
1-g.	Function of a router: (CO4)	
	(a) converting the data from one format to another	
	(b) Forward the packet to the up links	
	(c) error detection in data	
	(d) None of the given	
1-h.	This storage service can be used without attaching/mounting any instance:	
	(CO4)	
	(a) S3	
	(b) EFS	
	(c) EBS	
	(d) None of the given	
1-i.	Select your answer for the statement "Can interconnected colocation augment your data center strategy?".(CO5)	,
	(a) Not really, because data centers are all the same	

	(d) None of these	
1-j.	What is the name of the software that lets you run multiple operating systems on one physical server? (CO5)	1
	(a) Processor	
	(b) Hypervisor	
	(c) Virtual Machine	
	(d) Guest Operating System	
2. Atter	mpt all parts:-	
2.a.	Discuss VMM with and its types. (CO1)	2
2.b.	Discuss Utility Computing and its applications. (CO2)	2
2.c.	Enlist the needs of cloud auditor. (CO3)	2
2.d.	Brief the advantages of migrating to cloud storage. (CO4)	
2.e.	Define Data Center Networking. (CO5)	2
	SECTION B	30
3. Answ	ver any <u>five</u> of the following:-	
3-a.	Explain network virtualization also discuss its two types.(CO1)	6
3-b.	Brief role of SLA for Cloud Service Provider and Consumer. (CO1)	6
3-c.	State principle logics of SOA and its advantages over traditional computing architecture. (CO2)	6
3-d.	Discuss the similarities and differences between SOAP and RESTful architecture. (CO2)	6
3.e.	Brief about category of product that are being offered in IBM CCRA. (CO3)	6
3.f.	Discuss the importance of being Security Groups stateful. (CO4)	6
3.g.	Write notes on: (i) Solutions for Cooling related cost, (ii) Effect of choosing storage solutions for data centers. (CO5)	6
	SECTION C	50
4. Answ	ver any <u>one</u> of the following:-	
4-a.	Enlist deployment models and write short notes on each of them. (CO1)	10
4-b.	Write short notes on: (i) Parallel Computing (ii) Cluster Computing (CO1)	10
5. Answ	ver any <u>one</u> of the following:-	
5-a.	Discuss the advantages of REST services over traditional Web Services. (CO2)	10

(b) Yes, because it relies on fiber-connected facilities located in urban centers

(c) Depends on its dietary fiber

5-b.	Enlist and brief the HTTP methods in REST API. (CO2)	10
6. Answ	ver any <u>one</u> of the following:-	
6-a.	Discuss interoperability and its relationship with deployment models. (CO3)	10
6-b.	Discuss about scope of control between cloud consumer and cloud service provider in terms of services, cost, security and responsibility. (CO3)	10
7. Answ	ver any <u>one</u> of the following:-	
7-a.	Provide a brief of DynamoDB and differentiate it with RDS. (CO4)	10
7-b.	In a block of addresses, the IP address of one host is 182.44.82.16/26. Find the first address, the last address, total possible hosts and network mask. (CO4)	10
8. Answ	er any <u>one</u> of the following:-	
8-a.	Explain about the network access switch placement and its role in the architecture of ToR. (CO5)	10
8-b.	Differentiate the 'Scale up' architecture with 'Scale out' architecture of data centers. (CO5)	10