Printed	_	Subject Code:- ACSIOT0602 Roll. No:
	NOIDA INSTITUTE OF ENGINEERING A	ND TECHNOLOGY, GREATER NOIDA
	(An Autonomous Institute Af	
	B.Te	
	SEM: VI - THEORY EXAMIN	
Time <sup>,</sup>	Subject: Cloud and : 3 Hours	Max. Marks: 100
	al Instructions:	Wax. Warks. 100
		per with the correct course, code, branch etc.
		ons -A, B, & C. It consists of Multiple Choice
	ns (MCQ's) & Subjective type questions.	
<b>2.</b> Maxin	mum marks for each question are indicated	on right -hand side of each question.
<b>3.</b> Illustr	rate your answers with neat sketches where	ver necessary.
<b>4.</b> Assum	me suitable data if necessary.	
-	rably, write the answers in sequential order	
		n material after a blank sheet will not be
evaluate	ed/checked.	
	SECTION	1 A 20
1. Atten	mpt all parts:-	
1-a.	What is Cloud Computing? [CO1]	1
	(a) Cloud Computing means pro- networking, etc	viding services like storage, servers, database,
	(b) Cloud Computing means stor	ing data in a database
	(c) Cloud Computing is a tool use	ed to create an application
	(d) None of the mentioned	
1-b.	Amazon provides develop applications and isolate themselves from	pers the tools to build failure resilient 1 om common failure scenarios. [CO1]
	(a) EC2	
	(b) VPC	
	(c) Both A and B	
	(d) None of the above	
1.6	• •	ont in two object the Comite Oriented 4
1-c.	Which one of the following statemed Architecture? [CO2]	ent is true about the Service-Oriented 1
	(a) It is possible to exchange	data between applications from different

(b) It provides computational resources on-demand as a metered service. (c) Service-Oriented Architecture allows using the application as a service for other applications. (d) Both A and C VMWARE is example of \_\_\_\_\_\_ Virtualization [CO2] 1 1-d. (a) Application Level (b) Library Level (c) Hardware Abstraction layer level (d) None of These Salesforce is example of \_\_\_\_\_ [CO3] 1-e. 1 (a) IAAS (b) PAAS (c) SAAS (d) None of these 1-f. A \_\_\_\_\_ provides the cloud infrastructure and computing resources to the 1 general public over a public network. [CO3] (a) public cloud (b) private cloud (c) community cloud (d) hybrid cloud Which of the following is not a layer in edge computing environment. [CO4] 1 1-g. (a) Cloud Layer (b) Device Layer (c) Data Layer (d) Edge Layer 1-h. Edge computing expected to improve the..... [CO4] 1 (a) It can alleviate latency issues (b) It can ease network congestion (c) It can bolster bandwidth for IoT devices (d) All of the above 1-i. Streaming data refers to data which is..... [CO5] 1 (a) Continously generated

vendors without using additional programming.

	(b) Static	
	(c) Both	
	(d) None	
1-j.	(FOTA) refers to [CO5]	1
	(a) Film over-the-air	
	(b) Firmware over-the-air	
	(c) Fog over-the-air	
	(d) None	
2. Atte	empt all parts:-	
2.a.	Write any 4 advantages of cloud computing. [CO1]	2
2.b.	Point Out the primary purpose of RESTful systems in web service architecture. [CO2]	2
2.c.	What are the two major challenges in a cloud computing environment? [CO3]	2
2.d.	Mention role of edge application in cloud. [CO4]	2
2.e.	Define OTA in IoT. [CO5]	2
	SECTION B	30
3. Ans	wer any <u>five</u> of the following:-	
3-a.	Describe the history of cloud computing. [CO1]	6
3-b.	Differentiate among IaaS, PaaS, and SaaS. [CO1]	
3-c.	Explain publish-subscribe model in cloud computing. [CO2]	
3-d.	What is the main purpose of Service-Oriented Architecture? [CO2]	
3.e.	List out 10 advantages of cloud storage? [CO3]	
3.f.	Role of data privacy in edge application is important, Justify. [CO4]	
3.g.	Mention the role of complex event processing in edge computing. [CO5]	6
	SECTION C	50
4. Ansv	wer any <u>one</u> of the following:-	
4-a.	Explain different models for deployment in cloud computing. [CO1]	
4-b.	Discuss about Amazon EC2 Instances and its types. [CO1]	
5. Ans	wer any <u>one</u> of the following:-	
5-a.	What is virtualization? Explain about the virtualization of CPU and memory? [CO2]	10
5-b.	Compare SOA with traditional system architecture. [CO2]	10

## 6. Answer any one of the following:-

6-a.	Draw NIST Cloud Computing Reference Architecture and explain in detail. [CO3]	10
6-b.	Explain about the concept of Elastic Block Storage in cloud computing. [CO3]	10
7. Answ	er any <u>one</u> of the following:-	
7-a.	Draw the components of edge computing layered architecture. [CO4]	
7-b.	Discuss, how Edge AI can be used to improve ATMs' security. [CO4]	
8. Answ	er any <u>one</u> of the following:-	
8-a.	How complex event processing takes place in edge computing, Explain. [CO5]	10
8-b.	Explain AWS IoT Set up procedure. List the step by step process to connect a	10

