Name: Enrolment No:	UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: B. Tech. CSE with IOT & SC **Semester: VI**
Subject: Cloud Architecture and Deployment Models **Time: 03 hrs.**
Subject Code: **Max. Marks: 100**
Instructions: The marks for each question are given before.

SECTION A

S. No.		Marks	CO
Q 1	In a cloud based service environment, what are the benefits of portability and interoperability? Discuss a proper use case in support of your theory.	7	CO1
Q 2	Explain the difference between system call and hyper call. How are these handled?	7	CO2
Q 3	Explain Xen virtualization architecture. List the various components of Classic Data Centre.	8	CO1
Q 4 A. B.	Discuss the different categories of policies in AWS. How these policies are managed? What is the difference between Block storage and Object storage?	4 4	CO2

SECTION B

Q 5	What is Load Balancer? How load balancer group is created for use in cloud services? How many types of load balancers offered in AWS?	4 6 5	CO2, CO4
Q 6	Explain server less programming. Discuss any one tool/ technique of your choice to implement server less programming.	15	CO2, CO3
Q7. A. B. C.	What are the tangible and intangible benefits of VDI? Discuss the challenges of VDI. Discuss the various screen sharing techniques with example.	4 4 7	CO2, CO3
	Or		

A. B.	Discuss the primary functions of Cloud Broker with example. Explain and differentiate between the following – i. Technical / Business Broker ii. Internal / External Broker	**6** **9**	**CO2, CO5**
	SECTION C		
Q8. A. B. C.	Explain OpenStack and architectural diagram. Under which model of cloud the service provider may use Open Stack. Discuss the various key components of open stack.	**8** **7** **10**	
	Or		
A. B. C.	List and discuss the various roles as defined in the IBM CCRA. Discuss the role of each actor in a cloud implementation. With the help of neat diagrams, explain the BSS and OSS defined in IBM CCRA.	**7** **8** **10**	**CO1, CO2**

Name: Enrolment No:	UPES

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: B. Tech. CSE with IOT & SC **Semester: VI**
Subject: Cloud Architecture and Deployment Models **Time: 03 hrs.**
Subject Code: **Max. Marks: 100**
Instructions: The marks for each question are given before.

SECTION A

S. No.		Marks	CO
Q 1	In a cloud based service environment, what are the benefits of portability and interoperability? Discuss a proper use case in support of your theory.	7	CO1
Q 2	Discuss the various types of instances in AWS.	7	CO2, CO3
Q 3	Discuss the benefits and challenges of VDI.	8	CO1
Q 4	Explain the flowing – i. SSH ii. RDP	8	CO2, CO4, CO7

SECTION B

Q 5 A.	Exhibit the benefit and usage of the auto-scaling feature in cloud IaaS service delivery model.	8	CO2, CO4, CO8
B.	How AWS manages Auto Scaling?	7	
Q 6	Under Open Stack project which components are used for the following – i. Identity Management ii. Dash Board iii. Metering iv. Storage v. Network	15	CO2, CO3
Q7. A.	What is CCMP?	7	CO2, CO3
B.	How CCMP is managed in IBM CCRA?	8	
	Or		
A.	Discuss the primary functions of Cloud Broker with example.	6	CO2, CO5

B.	Explain and differentiate between the following – iii. Technical / Business Broker iv. Internal / External Broker	**9**	
	SECTION C		
Q8. A. B. C.	Explain the various Cloud Service Delivery models with proper example. Discuss the workflow of IaaS service delivery. Discuss various format for machine images with highlighting at least one interoperable machine image format.	**12** **7** **6**	**CO1, CO2, CO7**
	Or		
A.	Explain and differentiate between the NIST and IBM CCRA.	**25**	**CO1, CO2**