Name:

**Enrolment No:** 



## **UPES**

## **End Semester Examination, May 2023**

Course: Cloud Computing Architecture Semester: IV

Program: B TECH (CSE+CCVT)

Course Code: CSVT2007

Time : 03 hrs.

Max. Marks: 100

**Instructions: All questions are mandatory** 

SECTION A (5Qx4M=20Marks)				
S. No.	(0 Q11111 2011411115)	Marks	СО	
Q 1	Compare the different cloud service delivery models in a tabular form.	4	CO1	
Q 2	Differentiate between scalability and elasticity.	4	CO2	
Q 3	Do a comparative analysis of three types/categories of SaaS.	4	CO3	
Q 4	Discuss the key objectives of NIST cloud computing program.	4	CO4	
Q 5	How elastic disk provisioning architecture benefits the cloud consumer?	4	CO2	
	SECTION B (4Qx10M= 40 Marks)			
Q 6	Discuss the advantages of PaaS in detail.	10	CO1	
Q 7	Name the key components involved in Dynamic Failure Detection and Recovery Architecture. Draw the diagram of Dynamic Failure Detection and Recovery Architecture and discuss the step by step working.	10	CO2	
Q 8	What are the desirable characteristics in SaaS.	10	CO3	
Q 9	Discuss the three scenarios of interactions between the actors in NIST Cloud Computing Reference Architecture.  OR  Explain the range of services provided by cloud broker in the NIST Cloud Computing Reference Architecture.	10	CO4	
	SECTION-C (2Qx20M=40 Marks)			
Q 10	What is Rapid Provisioning Architecture? Draw its diagram. Explain the key components and their functionalities involved in this architecture. Give a step-by-step description to provide an insight into the inner workings of a rapid provisioning architecture.	2+2+8+8=20		

	OR		CO2
	(a) Discuss the purpose and working of Redundant Storage	10*2=20	
	Architecture. Draw its diagram to explain the working.		
	(b) Draw a detailed diagram to explain the working of dynamic		
	scalability architecture		
Q 11	Explain the IBM cloud computing reference architecture and explain the	20	
	following terms related to it.		
	a. Evolution & Version		CO4
	b. Architectural elements		CO4
	c. Roles		
	d. Applications		