Name:

**Enrolment No:** 



## UPES End Semester Examination, May 2024

## Course: Cloud Application Development Program: BTech CS CCVT H/NH Course Code: CSVT 3016

Semester: VI Time : 03 hrs. Max. Marks: 100

## Instructions: Internal choice in Q9 and Q11

SECTION A (5Qx4M=20Marks)				
S. No.		Marks	СО	
Q 1	Define domain decomposition in Threading model.	4	CO2	
Q 2	Compare Data Parallelism and Process parallelism	4	CO1	
Q 3	Define Fabric services.	4	C01	
Q 4	Give examples of each type : <i>Graph databases, Tuple stores, Object databases, document stores</i>	4	CO3	
Q 5	Following service is used for:AWS Cognito, AWS Dynamo,AWS Shield, Code Whisperer	4	CO5	
	SECTION B		•	
	(4Qx10M= 40 Marks)			
Q 6	How Aneka multithreading is different from traditional multithreaded applications.Also compare Local vs Aneka thread with the help of state diagram.	10	CO2	
Q 7	Multithreading programming model of aneka is simple as replacing the System.Threading.Thread class of .NET and introducing the AnekaApplication class.Write down few methods of AnekaThread API and describe the elements of Aneka thread programming model	10	CO2	
Q 8	Differentiate a)Vector processor and Superscalar processor b) Shared vs distributed MIMD model	10	CO1	
Q 9	The task programming model provides a very intuitive abstraction for quickly developing distributed applications on top of Aneka.Depict the Task programming model scenario and discuss various middleware services provided. <i>OR</i> <i>MPI (Message Passing Interface)</i> is a specification for developing parallel programs which communicate by exchanging messages. Draw MPI Program applications structure and give example of MPI implementation .	10	CO3	

SECTION-C (2Qx20M=40 Marks)				
Q 10	The MapReduce Programming Model establishes the conceptual framework and runtime support necessary for implementing MapReduce applications within the Aneka environment.Draw and explain a)Aneka Mapreduce infrastructure, b)Anyone of scheduling or execution architecture	20	СО3	
Q 11	Cloud computing the preferred technology for business and consumer sector.CRM application is one such area in which Salesforce is pioneer.Draw and explain the architecture of Force.com platform OR a)You need to design a web application on cloud platform ,it needs to be highly available and scalable as per the requirement. List and discuss the required services/concepts/features for developing this application.Note:No need to write development steps b)Write down the steps to host a static website on AWS .Include all necessary checks.	20	CO4	