Name: **Enrolment No:**	

UPES

End Semester Examination, May 2025

Course: Cloud Application Development **Semester: VI**

Program: BTech CS CCVT H/NH **Time : 03 hrs.**

Course Code: CSVT 3016 **Max. Marks: 100**

Instructions: Internal choice in Q9 and Q11

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Define POSIX standard and write down two charactestics of Thread	**4**	**CO2**
Q 2	Write down two laws of caution to be taken in account for parallelism.	**4**	**CO1**
Q 3	Elaborate HTTP,SOAP,WSDL with respect to Web services.	**4**	**CO1**
Q 4	Give examples of each: *Tabular stores, Object databases, Graph databases, Tuple stores, ,*	**4**	**CO3**
Q 5	Following service are used for:AWS Sagemaker---, AWS Route 53---, Code Whisperer ---, AWS Cognito	**4**	**CO4**
	SECTION B **(4Qx10M= 40 Marks)**		
Q 6	Describe approaches of parallel programming model in detail.	**10**	**CO1**
Q 7	Write down few basic operations of Aneka Threading API alongwith Aneka Thread Lifecycle states. Also explain three major elements that constitute the object model of applications based on the Thread Programming Model.	**10**	**CO2**
Q 8	Elaborate various challenges of Data Intensive Computing. Give any two examples of prominent implementations supporting data-intensive applications.	**10**	**CO4**
Q 9	Parameter Sweep file that is specific class of Task programming model defines the template task for executing the BLAST application..It is an XML document ,write down the XML file and explain each section. **OR** Depict the Task programming model scenario and discuss various middleware services provided.	**10**	**CO3**

SECTION-C (2Qx20M=40 Marks)			
Q 10	Draw and explain the Aneka MapReduce infrastructure, including the architecture of the MapReduce Scheduling Service and the MapReduce Execution Service. Additionally, illustrate the working of the MapReduce model with a suitable example, such as a Word Counter job, and explain how it is processed within the Aneka platform.	**20**	**CO3**
Q 11	Depict an online health monitoring system based on ECG analysis hosted in the cloud also explain it in detail. **OR** a) You are working as a cloud architect for a rapidly growing e-commerce startup. The company plans to launch a new web application expected to handle unpredictable and spiky user traffic from across the globe. To ensure continuous availability and seamless performance, the application must be designed to be highly scalable,secure and fault tolerant. As part of the team, your task is to write down and explain AWS services involved in creating expected web application.Note:Database,webserver etc can be of your choice	**20**	**CO4**