VIT
Vellore Institute of Technology

School of Electronics Engineering
Fall Semester 2024-25
Continuous Assessment Test –I

BECE 355L – AWS for Cloud Computing

Slot: B2+TB2
Class Numbers : VL2024250103217, VL2024250103195, VL2024250103231, VL2024250104000, VL2024250103208, VL2024250103237

Date:26-08-2024 **Max. Marks:** 50 **Duration:** 90 Mins

Answer ALL the Questions

Q.No	Questions	Mod.	CO	BL	Marks
1. a.	You own an AWS account for a video streaming business, hosted primarily in the North Virginia region. Most of your clients are located in Chennai, India. These clients frequently experience latency issues when accessing video content. Which AWS solution(s) would you implement to mitigate latency issues for the Chennai-based clients? Provide justification for your choice, considering performance, and user experience.	1	CO1	BL2	05
1.b.	Cloud environments offer three primary service models: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). For each option given below, identify the most appropriate cloud service model it belongs to **Options:** a. Dropbox b. Google App Engine c. Compute and Storage d. YouTube e. Google Compute Engine	1	CO1	BL2	05
2.a.	You are planning to migrate your business to the cloud. However, you want to retain control over the operating system (OS), runtime, and middleware on your premises. Identify which cloud service model would be most appropriate for your needs, and justify your choice. Additionally, analyse the specific resources you can utilize from the chosen cloud service model.	1	CO1	BL3	05
2.b.	Tim's organization is planning to move to a cloud deployment model. They aim to leverage the management benefits of a cloud service while ensuring that the hardware and middleware remain	1	CO1	BL3	05

	on-premise with company-owned data. Recommend an appropriate cloud deployment model for Tim's organization, and explain why this model is suitable given their requirements.				
3.	A university plans to move its on-premise academic, research, and support services platform to the cloud. This platform includes databases for students, faculty, and staff, as well as data like lecture notes and digital assignments. The platform currently struggles with performance, especially during peak times. Provide a solution as an AWS Cloud Practitioner to ensure a smooth and flawless migration to the cloud. Illustrate in detail the AWS core services you would use to improve the platform's performance and reliability during peak traffic.	2	CO2	BL3	10
4.	You have been using Amazon Relational Database Service (Amazon RDS) for the last year to run an important application with automated backups enabled. During routine maintenance someone from your team accidentally drops an important table, causing an outage. Determine how you would recover the missing data from your Amazon RDS database, ensuring that the duration of the outage is minimized.	2	CO2	BL3	10
5.a.	Your web application needs four instances to support steady traffic nearly all the time. On the last day of each month, the traffic triples. Interpret a cost-effective way to handle this traffic pattern	2	CO2	BL2	05
5. b.	List the differences between instance store and elastic block store (EBS)?	2	CO2	BL2	05