



VIT

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Continuous Assessment Test I – January 2025

Programme	: MCA	Semester	: WINTER 2024-2025
Course Title	: Cloud Computing	Code	: PMCA506L
		Class Nbr(s)	: CH2024250501736
Faculty (s)	: Dr.M.Priyaadharshini	Slot	: E2+TE2
Time	: 90 minutes	Max. Marks	: 50 marks

Answer all the Questions (5 * 10 = 50)

General Instructions

Write only your registration number on the question paper in the box provided and do not write other information.

1.	Consider our university LMS for managing all the course activities for the students and the faculties. The platform needs collaborative, scalable, cost effective and interactive virtual environment. But the conventional solutions are not giving optimal solutions for many users. Suggest and illustrate a suitable Cloud deployment model for the above requirements.	10
2.	Illustrate the components required for private cloud infrastructure setup and challenges involved in managing the private cloud when compared with the public cloud for e-governance applications.	10
3.	Why does Cloud computing make use of virtualization as backbone technology? Justify your answer with the example. Illustrate the advantages and challenges of virtualization for cloud computing.	10
4.	Assume you are deploying a healthcare website with patient, doctor dashboard, appointment, patient health reports, and prescriptions. SMS notification for appointment and doctor availability. Feedback and rating for doctors and services. Free consultation for first time. Helpline service 24 hrs with AI chatbot. Illustrate the suitable cloud service for the application development. Highlight its advantage.	10
5.	In a multi-tenant architecture, multiple instances of an application operate in a shared environment to achieve cost and operational efficiency. An application operator must safeguard tenant data by making sure it is accessible only to that tenant. Draw and illustrate the architecture of tenant isolation at the database-level which allows customers to choose the right architecture that meets their risk and cost requirements.	10