School of Computing Science and Engineering
Master of Computer Applications
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem II - E1PZ201T - Introduction to Cloud Computing

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Describe the basic architecture of an IaaS (Infrastructure as a Service) platform and its main components?	K2 (2)
2)	Explain the four main deployment models in cloud computing?	K1 (3)
3)	Depict the architecture of a virtual machine (VM), outlining the key components such as the hypervisor, guest operating system, and virtual hardware	K2 (4)
4)	How do you define language dialects?	K2 (6)
5)	Discuss the layers of the web services stack, including their functionalities and interactions	K3 (6)
6)	A) What are the characteristics of SOAP ? B) Describe the SOAP Usage models.	K3 (9)
7)	Point out the requirements and what are the limitations of SLA	K4 (8)
8)	a) Explain Penalty costs for exponential demand. B) Consider the peak computing demand for an organization is 120 units. The demand as a function of time can be expressed as: The resource provisioned by the cloud to satisfy current demand at time t is given as: Where, δ is the delay in provisioning the extra computing recourse on demand, The cost to provision unit cloud resource for unit time is 0.9 units. Calculate the penalty. [Assume the delay in provisioning is π 12 time units and minimum demand is 0] (Penalty: Either pay for unused resource or missing service delivery)	K4 (12)

OR

	A) How Parellel Database is different from Relational Database . B) Draw and explain the Parellel Database Architectures.	K4 (12)