

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
MCA/MSC IT 2024-25 Mid-Term Examination

Semester: 2
 Subject Code: 05201289
 Subject Name: (Cloud Computing - I)

Date: 13/03/2025
 Time: (1hr:30min)
 Total Marks: 40

Instructions:

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1	Answer the following.	[10]
(a)	3 short questions of 1 mark each	[3]
	(i) Write the main significant of Cloud Computing	
	(ii) Define: Virtualization in cloud	
	(iii) List the two challenges in storing enterprise level of data.	
(b)	Objective type/MCQs/True-False/Fill in blanks (7 questions of 1 mark each)	[7]
	(i) Which of the following is not a characteristic of cloud computing? a) On-demand self-service b) Resource pooling c) Limited scalability d) Measured service	
	(ii) What is the key feature of Platform as a Service (PaaS)? a) Provides storage as a service b) Offers tools for application development and deployment c) Allows access to software applications over the internet d) Delivers end-to-end infrastructure	
	(iii) True/ False: In a private cloud, the computing infrastructure is shared among multiple companies.	
	(iv) True/False: Application virtualization allows software to run without traditional installation on the client system.	
	(v) The primary purpose of virtualization in IT infrastructure is to create a virtual version of physical resources, such as servers, storage, and networks, to improve _____.	
	(vi) IAAS Full Form _____	
	(vii) List any two types of virtualizations in cloud.	
Q.2	Answer the following. (2 or 3 mark questions)	
(a)	Two Questions of 2 Marks	[10]
	(i) How would you use Database as a Service (DBaaS) to design a scalable database solution for a growing e-commerce platform.	[4] (02)
	(ii) Summarize the history and evolution of cloud computing. How has it impacted the IT industry over time?	(02)
(b)	Two Questions of 3 Marks	
	(i) Can you provide a real-world example of how storage virtualization is used?	[6]
	(ii) Explain the concept of network virtualization and describe its types. How does it enhance the functionality of a network?	(03) (03)
Q.3	Attempt any TWO.	
	(i) What are the key distinctions between a public cloud and a private cloud.	[10]
	(ii) Assess the different cloud service models and justify which one would be the most suitable for a specific business scenario	(05) (05)
	(iii) What are the key components of the Multinet Protocol Driver, and how do they interact with virtual networks?	(05)
Q.4	Answer the following.	[10]
(a)	Contrast the different steps in creating an instance in Google Cloud Platform?	(05)
(b)	Examine the working process to store files in Cloud server.	(05)
	OR	
(b)	Compare and contrast structured and unstructured data storage in terms of organization	(05)