NATIONAL FORENSIC SCIENCES UNIVERSITY
M.Tech Cyber Security - Semester - II - August-2022

Subject Code: CTMTCS SII P5 EL6
Subject Name: Cloud Security & Forensics
Time: 11.00AM to 2.00 PM

Date: 05/08/2022

Total Marks: 100

Instructions:
1. Write down each question on separate page.
2. Attempt all questions.
3. Make suitable assumptions wherever necessary.
4. **Figures to the right indicate full marks.**

			Marks
Q.1	(a)	What is Cloud Computing? List out and Briefly explain Different Characteristics of Cloud Computing	05
		OR	
	(a)	List out and Briefly Explain Stakeholders of Cloud Architecture given by NIST	05
	(b)	Which are possible Attack Vectors for Cloud Computing?	05
	(c)	What is a Hypervisor in cloud computing ? Explain briefly the techniques of Virtualization.	07
Q.2	(a)	List out Difference between Hypervisor and Docker.	05
		OR	
	(a)	List out the Difference between Elliptic Curve Cryptography vs. Traditional Public Key Cryptography	05
	(b)	Define Hash Function. Discuss Hash Function Applications	05
	(c)	What is Symmetric Key exchange problem? How Public key encryption approach can resolve the same issue?	07
		OR	
	(c)	Define Encryption. Comment on security of Public Key Encryption Schemes	07
Q.3	(a)	What is Access Control ? List out different types of access control mechanism and briefly describe each of them.	08
	(b)	List out and Explain various types of Cloud Threats. Discuss Prevention Techniques for Cloud Threats	08
Q.4	(a)	List out and compare each cloud service models	05
	(b)	What is Cloud Accountability? List out Technical Mechanism for Achieving Accountability in the Cloud	05
		OR	
		What are the main characteristics of Hypervisor? How does a hypervisor work?	