

School of Computing Science and Engineering

Department of Computer Application

Mid Term Examination

Exam Date: 01 Oct 2023

Time : 90 Minutes

Marks : 50

Sem III - MCAE2421 - Ethical Hacking

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

- 1) Describe the role of ethical hackers in identifying and mitigating security threats K2 (2)
- 2) List out any two types of password attacks used for password cracking. K1 (3)
- 3) Briefly discuss the purpose of DoS protection mechanisms? K2 (4)
- 4) Compare and contrast the characteristics and behaviors of worms, viruses, and Trojan horses. K2 (6)
- 5) Discuss concept of cryptology in the context of cryptography K3 (6)
- 6) Apply the principles of asymmetric key cryptography to encrypt and decrypt a message. K3 (9)
- 7) Analyze the vulnerabilities in Windows Login Password systems. K4 (8)
- 8) Analyze the cryptographic weaknesses in a given encryption algorithm K4 (12)

OR

In a Diffie-Hellman Key Exchange, Alice and Bob have chosen prime value $q = 17$ and primitive root $= 5$. If Alice's secret key is 4 and Bob's secret key is 6, what is the secret key they exchanged? K4 (12)