School of Computing Science and Engineering
Department of Computer Application
Mid Term Examination

Exam Date: 26 Sep 2023
Time : 90 Minutes
Marks : 50

Sem III - MSCS2310 - Cyber Security
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1) Describe Modulo Arithmetic operations and properties in detail. — K2 (2)

2) Write the Euclidean Algorithm — K1 (3)

3) Describe the differences between steganography and cryptography with examples. — K2 (4)

4) Encrypt the following using play fair cipher using the keyword MONARCHY. Use X for blank spaces "SWARAJ IS MY BIRTH RIGHT". — K2 (6)

5) Define attack and explain it in detail alongwith examples — K3 (6)

6) Discuss Euler's theorem taking a suitable example. — K3 (9)

7) Perform encryption and decryption using RSA algorithm for the following.
p=3; q=11, e=7; M=5 — K4 (8)

8) Discuss about Public Key distribution and Symmetric-Key Distribution. — K4 (12)

OR

Discuss the Diffie-Hellman key exchange algorithm with its merits and demerits. — K4 (12)