

B. Sc. (HONOURS) SIXTH SEMESTER EXAMINATIONS, 2021
RAMANANDA COLLEGE

Subject: Computer Science

Course Code: SH/CSC/603/DSE-3

Course ID: 61526

Course Title: Information Security (Practical)

Full Marks: 15

Time: 2 Hrs.

The figures in the margin indicate full marks

(Viva = 5, Experiment = 10)

1. Answer *any one* of the following questions: (10)

- a) Demonstrate the use of Network tools: ping, ipconfig, ifconfig, tracert, arp, netstat, whois
- b) Use of Password cracking tools : John the Ripper, Ophcrack. Verify the strength of passwords using these tools.
- c) Write a program in C (or in Python) to perform encryption and decryption of Caesar cipher.
- d) Write a program in C (or in Python) to Perform encryption and decryption of a Rail fence cipher.
- e) Use nmap/zenmap to analyze a remote machine.
- f) Use Burp proxy to capture and modify the message.
- g) Demonstrate sending of a protected word document.
- h) Demonstrate sending of a digitally signed document.
- i) Demonstrate sending of a protected worksheet.
- j) Demonstrate use of steganography tools.