Tribhuvan University
Faculty of Humanities & Social Sciences
OFFICE OF THE DEAN
2021

Bachelor in Computer Applications
Course Title: Information Security
Code No: CACS459
Semester: VIII

Full Marks: 60
Pass Marks: 24
Time: 3 hours

Candidates are required to answer the questions in their own words as far as possible.

Group B

Attempt any SIX questions.

[6×5 = 30]

2. What is Information Security? List and briefly define fundamental security design principles. [1+4]

3. Explain HMAC with its objectives. [5]

4. What are the vulnerabilities of passwords? Explain different strategies used for the selection of effective password. [2+3]

5. Define access right. Explain the concept of trust framework. [1+4]

6. Describe about honeypot with the types of honeypots that may be deployed. [5]

7. How can you say that Intrusion Detection System is the backbone for Information Security? Justify along with its categories. [5]

8. Explain the terms SSL, TSL and handshake protocol. [5]

Group C

Attempt any TWO questions.

[2×10 = 20]

9. Define the terms threats and attacks in terms of Information Security. Explain different types of security threats in detail. [2+8]

10. What is a cryptosystem? Explain the concepts of Vignere and Rail Fence Ciphers in detail. [2+8]

11. What is a security audit? What is its importance? Explain the security auditing architecture in detail. [2+2+6]