

END SEMESTER EXAMINATION MAY 2023

Course Code: CACSE24

Course Title: Data Privacy and Security

Time: 3 Hours

Max. Marks: 50

Note: - Attempt all the five questions. Missing data/ information if any, maybe suitably assumed & mentioned in the answer.

Q. No.	Question	Marks	CO
Q1	Attempt any 2 parts of the following.		
1a	Explain the difference between conventional encryption and public-key encryption? Illustrate timing attacks in detail?	5	CO1
1b	What is network security? explain the difference between information and network security? Explain various types of attacks on encrypted messages?	5	CO1
1c	Explain two primitive sets of Claude Shannon and substitution-permutation ciphers? What is Avalanche effect?	5	CO2
Q2	Attempt any 2 parts of the following.		
2a	What is IP spoofing? Explain its various security solutions? Explain the difference between active and passive threats? Explain various types of active and passive threats in detail?	5	CO2
2b	Explain Diffie-Hellman algorithm. State its uses and drawbacks, if any.	5	CO3
2c	Explain the difference among confidentiality and integrity of information while transmitting in the network? Explain the difference between DoS error and DDoS error?	5	CO3
Q3	Attempt any 2 parts of the following.		
3a	Explain various opportunities, current trends and challenges of cloud computing? Explain binding corporate rules (BCRs) in detail?	5	CO4
3b	Explain various privacy laws in India? According to the eminent US law scholar William L. Prosser (1960), the invasion of privacy would be deemed to have occurred under the following four claims. Explain all four claims in detail.	5	CO4
3c	Explain five categories of ethical issues involving IT applications? Explain the principal attacks on user authentication	5	CO3

Q4	Attempt any 2 parts of the following.		
4a	Explain five moral dimensions of information age?	5	CO3
4b	Explain the difference among data swapping and data perturbation? Explain the difference between ethics and privacy of the data?	5	CO4
4c	Explain different types of cloud computing? What are various security and privacy issues in cloud computing?	5	CO5
Q5	Attempt any 2 parts of the following.		
5a	What security measures should be considered to enforce security mechanisms? Explain the role of DPO in detail?	5	CO4
5b	What Are the Data Anonymization Methods? What data should Anonymized? Illustrate the difference among duplication, and distribution of information in software privacy?	5	CO5
5c	Differentiate among discretionary access control and mandatory access control with suitable examples? What is k-anonymization? How do you select the value of k?	5	CO5