MASTER OF SCIENCE (INFORMATION SECURITY)/P. G. DIPLOMA IN INFORMATION SECURITY (MSCIS/PGDIS)

Term-End Examination December, 2024

MSEI-023: CYBER SECURITY

Time: 2 Hours Maximum Marks: 50

Note: Question No. 1 is compulsory. Attempt any three questions from the rest.

- 1. Write short notes on the following: $4\times5=20$
 - (a) Principle of least privilege in access control
 - (b) Zero-Day Vulnerabilities
 - (c) Role of Multi-Factor Authentication (MFA)
 - (d) Social Engineering attacks
- 2. What is domain cache poisoning attack? How can it be prevented?

- 3. Explain the architecture and working of a Public Key Infrastructure (PKI). 10
- Describe the steps involved in performing a Vulnerability Assessment and Penetration Testing (VAPT) on a network.
- Describe the lifecycle of a ransomware attack, from initial infection to encryption and ransom demands.