

**MASTER OF SCIENCE  
(INFORMATION SECURITY)/  
P. G. DIPLOMA IN INFORMATION  
SECURITY (MSCIS/PGDIS)  
Term-End Examination  
June, 2025  
MSEI-023 : CYBER SECURITY**

*Time : 2 Hours*

*Maximum Marks : 50*

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

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1. Write short notes on the following : 4×5=20
  - (a) OWASP top ten vulnerabilities for web application security.
  - (b) Advanced Persistent Threats (APT's)
  - (c) Botnets
  - (d) Cloud security and its unique challenges

**[ 2 ]**

2. How are passwords stored at a server (e. g. at an e-Commerce establishment) ? How can hackers get user-passwords by stealing information from the servers ? 10
3. Explain the key principles and components of the Kerberos authentication protocol. Provide a step-by-step description of how a user can authenticate to a service using Kerberos. 10
4. Explain the process of a man-in-the-middle (MITM) attack and various techniques used to execute it. 10
5. Describe the steps involved in security a cloud computing environment, focusing on Identity and Access Management (IAM), encryption and network security. 10

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