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MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : DECEMBER - 2025
SEMESTER - II

Sub : CTIT (Cyber Security + Intro. Block Chain) (MSC24 -201)

Date : 31/12/2025

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2-3 lines. (Any 5) (10)

1. What is Digital Signature?
2. Define the term "Private Key".
3. Define the term "Trojan".
4. What is "Booster Cheque"?
5. Define the term "smart contracts".
6. Define the term "Proof of Work".
7. Define the term "Cyber Bullying".

Q. 2. Answer the following in short. (Any 4) (20)

1. Write a short note of "Digital Copyrights".
2. Define the term "Firewall", Explain Packet Filtering Firewall.
3. Explain the following attacks: a) Steganography b) Password Cracking.
4. Write a short note on "Intrusion detection and Prevention Techniques"
5. Explain in detail types of block chain.
6. Write a short note of money laundering process.

Q. 3. Answer the following in detail. (Any 3) (30)

1. Explain any five types of Banking or finance related to cyber crime.
2. Explain in detail working of Public Key Infrastructure (PKI).
3. Explain in detail a) Symmetric key Cryptography and b) Asymmetric key Cryptography.
4. How Phishing is carried out. Explain the variants of Phishing.
5. What is Block chain? Explain the components of block chain.
