# END TERM EXAMINATION

## THIRD SEMESTER [BCA] DECEMBER 2024

| Paper Code: BCAT-213 | Subject: Cyber Security |
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### (BATCH 2021 ONWARDS)

| Time: 03 Hours | Maximum Marks:60 |
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**Note: Attempt five questions in all including Q. no. 1 which is compulsory.
Select one question from each unit**

Q1   Answer the following **(Any Five)**:                          **(5x4=20)**
  (a)   Explain different password cracking techniques.
  (b)   What are Command and Control (C & C) needs of a botnet? Discuss.
  (c)   Write brief notes on – cyber bullying, firewall, &RFC2822
  (d)   Distinguish between user authentication and user authorization.
  (e)   Explain the rules of evidence applicable to digital forensics.
  (f)   Elucidate the basic security standards required for HTTP applications.
  (g)   Explain some common types of cybercrimes.
  (h)   Discuss the need for cyber forensics.

### UNIT-I

Q2   What is the concept of layering approach to cyber security? Explain the different layers of cyber security.                          **(10)**

Q3   (a)   What are the major categories of cybercrime? Write a brief note on each of them.                          **(5)**
  (b)   Discuss the security vulnerabilities on a cloud computing environment                          **(5)**

### UNIT-II

Q4   (a)   Explain major cybercrime attacks that can happen on mobile phones? Write a brief note on preventive measures to avoid these attacks.                          **(5)**
  (b)   Distinguish between DOS attack and DDOS attack.          **(5)**

Q5   (a)   What is phishing? Explain the working of a standard phishing attack.                          **(5)**
  (b)   Explain the benefits of using key loggers. What is the purpose of steganography in cyber security, explain.                          **(5)**

### UNIT-III

Q6   (a)   Explain concept of symmetric key cryptography in information security.                          **(5)**
  (b)   Write a note on i) End- to-End encryption and ii) Digital signature.                          **(5)**

Q7   (a)   Discuss some major web application security risks.          **(5)**
  (b)   Explain the term spoofing in the context of email security. What are the objectives of Identity Access Management?                          **(5)**

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## UNIT-IV

Q8    Define cyber forensics. Explain the life cycle of digital forensics.          **(10)**

Q9    (a)    Explain the five general rules of digital evidence.                    **(5)**
      (b)    Write notes on **(any two)**:                                          **(5)**
             i)      Digital forensic investigation tool
             ii)     Need for cyber forensics
             iii)    Process of computer forensics

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