END TERM EXAMINATION

THIRD SEMESTER [BCA] DECEMBER 2024

Paper Code: BCAT-213   **Subject: Cyber Security**

(BATCH 2021 ONWARDS)

Time: 03 Hours   **Maximum Marks:60**

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)**

P.T.O.

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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