CAMELLIA INSTITUTE OF ENGINEERING AND TECHNOLOGY

3rd Continuous Assessment – Even 2025

Department: CSE Semester: 8TH

Subject Name: Cryptography and Network Security

Subject Code: PEC CS 801B

Full Mark: 25 Time: 45minutes

Group – A

(Answer any five)

(5*1=5)

1.

i) The principle of _____ ensures that only the sender and the intended recipients have access to the contents of a message.

ii) Interruption attacks are also called as _____ attacks.

iii) What is Denial of service attack?

iv) Book cipher is also called as _____.

v) There are _____ rounds in DES.

vi) _____ is based on the IDEA algorithm.

vii) _____ increases the redundancy of plain text.

Group – B

(Answer any four)

(4*5=20)

2. Using S-DES, find the two keys K1 and K2 from the key(0111111101) where P10=(3,5,2,7,4,10,1,9,8,6), P8=(6,3,7,4,8,5,10,9).

3. Using S-DES, decrypt the string(10100010) using the key(0111111101) where IP=(2,6,3,1,4,8,5,7), IP^{-1} =(4,1,3,5,7,2,8,6). E/P=(4,1,2,3,2,3,4,1), S0=((1,0,3,2),(3,2,1,0),(0,2,1,3),(3,1,3,2)), S1=((0,1,2,3),(2,0,1,3),(3,0,1,0),(2,1,0,3)), P4=(2,4,3,1).

4. Using PLAYFAIR technique, encrypt the plaintext “CRYPTOGRAPHY”. The key is “CAMELLIA”.

5. Prove that, [(a mod n) x (b mod n)] mod n = (axb) mod n

6. In real life, how is the message integrity ensured?

7. Why is Mono-alphabetic Cipher difficult to crack?

8. Alice and Bob want to establish a secret key using the Diffie-Hellman Key Exchange protocol. Assuming the values as n=11, g=5, x=2 and y=3, find out the values of A, B and the secret key K1.

9. Distinguish between differential and linear cryptanalysis.

10. What is the purpose of the S-boxes in DES?

Department of Computer Science and Engineering
Camellia Institute of Engineering & Technology
Semester: **VIII**

Subject: **Cyber Law and Ethics** Subject Code: **OEC- CS801B**
Full Marks: **25** Time: **45 Mins.**

Group A

(MCQ Type Question) 5x1=5

1. **Which of the following is NOT a type of cybercrime?**
   a) Hacking b) Forgery c) Cyberstalking d) Trademark registration

2. **Which attack involves an unauthorized user passively monitoring network traffic?**
   a) Active Attack b) Passive Attack c) SQL Injection d) Trojan Horse

3. **Which type of malware allows attackers to gain unauthorized access to a system?**
   a) Trojan Horse b) Adware c) Spyware d) Ransomware

4. **What is the main objective of a Denial of Service (DoS) attack?**
   a) To steal sensitive data b) To overload a system and disrupt service c) To install malware d) To crack passwords

5. **Which of the following Indian laws addresses cybercrime?**
   a) IPC Section 302 b) IT Act 2000 c) Copyright Act d) Trade Secrets Act

Group B

Short Answer Type Questions 4x5=20

1. **Define cybercrime and explain different categories of cybercrime with examples.**

2. **Discuss the security challenges faced by mobile devices and how cryptographic techniques can enhance security.**

3. **Explain phishing and identity theft. How can individuals protect themselves from such attacks?**

4. **Describe different types of cyber-attacks like DoS, DDoS, SQL injection, and buffer overflow.**

Department of Computer Science and Engineering
Camellia Institute of Engineering & Technology
Subject: **E-Commerce & ERP** Subject Code: **OEC-CS802A**
Full Marks: 25 Time: 45 Mins.

Group: A

(Answer any 5) **5x1=5**

1. **E-Commerce stands for _____.**
   a. Electrical Commerce b. Electronic Commerce c. Entertainment Commerce d. ElectroChemical Commerce
2. **The World Wide Web (WWW) was introduced in the year ……**
   a. 1994 b. 1996 c. 1992 d. 1990
3. **Which among the following products is suitable for E-Commerce?**
   a. Books b. Vegetables c. All of these d. None of these
4. **_____ is a function of E commerce.**
   a. Marketing b. Supply Chain c. Finance d. All of the above
5. **_____mainly deals with buying and selling, especially on a large scale.**
   a. Shopping b. Commerce c. Retailing d. Distribution
6. **E-commerce has _____ scope than E-Business or Digital Business.**
   a. Higher b. Narrower c. Wider
7. **_____ is a part of the 4 important types of E-commerce.**
   a. All of the above b. B2B c. P2P d. C2A

Group: B

(Answer all question) **5x4=20**

1. What are the Advantages and Disadvantages of E-Commerce?

2. Describe **B2B**, **B2C**, **C2B**, **C2C** and **E – Governance**.

3. What are the cyber laws .

4. Describe different business models of e-commerce .

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