Bundelkhand Institute of Engineering & Technology, Jhansi
Department of Computer Science & Engineering
Class Test-1, (2023-24)
B.Tech 4th Semester (EE)

Subject Code: KNC-401
Time: 1 Hour,

Subject Name: Computer System Security
Max. Marks: 10

	Questions	Marks	CO
Attempt any 4 questions:			
a	Explain Integer Overflow Attack and Aims of Security.	2.5	1
b	Write short note on: (a) Confinement problem (b) Error 404	2.5	2
c	What do you mean by Control Hijacking? Explain defenses against Control flow hijacking.	2.5	1
d	Differentiate Active and passive attacks.	2.5	1
e	Describe format string vulnerabilities.	2.5	1

Bundelkhand Institute of Engineering and Technology
B.tech 2nd Year (ME, EC, CS, IT) 2022-2023
Computer System Security (KNC-301T)

Time: 1hour

Total Marks: 10

Roll No. ⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚

Note:
1) Attempt any 4 questions.
2) All questions carry equal marks

Ques. Attempt any five of the following questions		Marks: 4*2.5	Course Outcome
a.	Differentiate Active attacks and Passive Attacks.		CO1
b.	Describe Intrusion Detection System with its types.		CO2
c.	How do we solve Confinement Problems (levels)?		CO2
d.	What do you understand by Rootkits? Explain with its types.		CO2
e.	Define Control Hijacking and Integer Overflow attacks.		CO1

Bundelkhand Institute of Engineering & Technology, Jhansi
Department of Computer Science & Engineering
Class Test-2, (2022-23)
B.Tech 3rd Semester (EE+CE+CH)

Subject Code: KNC-301

Time: 1 Hours

Subject Name: Computer System Security

Max. Marks: 10

	Questions	Marks	CO
	Attempt any 4 questions:		
a	What are the various web server threats? Explain in brief.	2.5	3
b	Explain working of Browser isolation.	2.5	3
c	Define access control and types of access control.	2.5	3
d	List the basic terminology used in cryptography.	2.5	4
e	Describe cross site scripting and types of XSS attacks.	2.5	3

Bundelkhand Institute of Engineering & Technology, Jhansi
Department of Computer Science & Engineering
Class Test-2, (2022-23)
B.Tech 3rd Semester (CS+IT)

Subject Code: KNC-301

Time: 1 Hours

Subject Name: Computer System Security

Max. Marks: 10

Instruction: Attempt all questions.

Q.No.		Question	Marks	CO
1.		**Attempt all parts of the following:**	2	3
	a	What are the various issues in access control?	2	3
	b	Explain working of Browser isolation.	2	3
	c	Define Web Security with its goals.		
2.		**Attempt all parts of the following:**	2	4
	a.	List the basic terminology used in cryptography.	2	4
	b.	Explain the digital signature and its applications.		

Bundelkhand Institute of Engineering & Technology, Jhansi
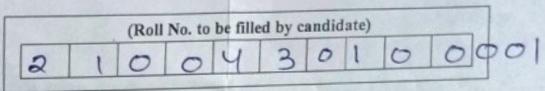**Department of Computer Science & Engineering**
Class Test-2, (2022-23)
B.Tech 3rd Semester (ME+EC)

Subject Code: KNC-301

Time: 1 Hours

Subject Name: Computer System Security

Max. Marks: 10

	Question	Marks	CO
	Attempt any 4 questions:		
a	What are the various web server threats?	2.5	3
b	Explain working of Browser isolation.	2.5	3
c	Define access control and types of access control.	2.5	3
d	List the basic terminology used in cryptography.	2.5	4
e	Describe UNIX-Windows access control with all its permissions.	2.5	3

(Roll No. to be filled by candidate)

2	1	0	0	4	3	0	1	0	0	0	0	1

B. Tech.
THIRD SEMESTER THEORY EXAMINATION, 2022-23
KNC-301
COMPUTER SYSTEM SECURITY

Time: 02Hours   Max Marks: 50

Note

- Attempt all questions.
- Assume missing data suitably. Illustrate the answer with suitable sketch.

1. **Attempt any four of the following:**   CO1   [4x2.5]
   a. What is computer system security? Discuss various attacks in computer security.
   b. Differentiate between authorized and unauthorized access with suitable example.
   c. Differentiate between server side attacks and insider attacks.
   d. Differentiate between active attacks and passive attacks.
   e. What are the five steps to protect your hardware?

2. **Attempt any two of the following:**   CO2   [2x5]
   a. What is security model? Explain Lattice model in detail.
   b. What are the components of security policy?
   c. How can we define "Zero-day" vulnerabilities?

3. **Attempt any two of the following:**   CO3   [2x5]
   a. What is browser isolation? How does the browser isolation technology work?
   b. How to prevent buffer overflow attack?
   c. Differentiate between DSA and MAC with suitable example.

4. **Attempt any two of the following:**   CO4   [2x5]
   a. What are web server threats in detail?
   b. Explain RSA algorithm. Performs encryption and decryption using RSA algorithm for p=11, q=13,e=7,m=9.
   c. Differentiate between digital signature and digital envelope with suitable example.

5. **Attempt any two of the following:**   CO5 ⁎   [2x5]
   a. What do you mean by DNS? Explain DNS rebinding attacks.
   b. What is firewall? Explain its types, as well as its functionality.
   c. What is fragmentation at network layer?

Total Number of Printed Pages: 02

(Roll No. to be filled by candidate)									3	9	

B. TECH.
FOURTH SEMESTER THEORY EXAMINATION, 2022-23
KNC 401
COMPUTER SYSTEM SECURITY

Time: 02 Hours   Max. Marks: 50

7+6
=12

Note: Attempt all questions. All questions carry equal marks.
Assume missing data suitably. Illustrate the answer with suitable
sketch.

1. Attempt any *FOUR* parts of the following: 4×3.5=14   CO
   a. What is computer system security? How it is useful in   CO1
      hardware simulation.

   b. What is SSL? How it works?   CO1

   c. Differentiate between spyware and ransomware with suitable   CO1
      example.

   d. Differentiate between active attacks and passive attacks.   CO1

   3.5   e. What is smishing?   CO1

2. Attempt any *TWO* parts of the following: 2×6=12   CO
   a. What is cross site scripting? Explain its type with suitable CO2
      example.

   b. What is VM based isolation?   CO2

   c. What is the role of cryptography in computer system   CO2
      security? Differentiate between symmetric key cryptography
      and asymmetric key cryptography with suitable example.

(6)

3. Attempt any *TWO* parts of the following: 2×6=12   CO
    a. What is DSC? What is the procedure to create DSC?   CO3

    b. Differentiate between OV SSL and EV SSL with suitable   CO3
        example.

    c. Differentiate between RSA and DSA with suitable example.   CO3

4. Attempt any *TWO* parts of the following: 2×6=12   CO
    a. What is intrusion detection system? Explain with the help of   CO4
        suitable example.

    b. What is email security? What is the measure for email   CO4
        security?

    c. What is Dos? Explain any two types of DoS with suitable   CO4
        example.