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# PRESIDENCY UNIVERSITY

## BENGALURU

### Mid - Term Examinations – October 2025

**Date:** 10-10-2025

**Time:** 11.45am to 01.15pm

<b>School:</b> SOCSE	<b>Program:</b> B.Tech	
<b>Course Code :</b> CSN2500	<b>Course Name:</b> Firewalls and Internet Security	
<b>Semester:</b> V	<b>Max Marks:</b> 50	<b>Weightage:</b> 25%

<b>CO - Levels</b>	<b>CO1</b>	<b>CO2</b>	<b>CO3</b>	<b>CO4</b>	<b>CO5</b>
<b>Marks</b>	<b>24</b>	<b>26</b>			

#### Instructions:

- (i) *Read all questions carefully and answer accordingly.*
- (ii) *Do not write anything on the question paper other than roll number.*

#### Part A

**Answer ALL the Questions. Each question carries 2marks.**

**5Q x 2M=10M**

<b>1</b>	What is a proxy firewall? Mention one advantage and one drawback.	<b>2 Marks</b>	<b>L2</b>	<b>CO1</b>
<b>2</b>	Define confidentiality and availability in computer security with examples.	<b>2 Marks</b>	<b>L2</b>	<b>CO2</b>
<b>3</b>	List and explain two types of firewall policies.	<b>2 Marks</b>	<b>L2</b>	<b>CO1</b>
<b>4</b>	What is spoofing? Give a simple example.	<b>2 Marks</b>	<b>L2</b>	<b>CO2</b>
<b>5</b>	What is the purpose of using HTTPS on websites?	<b>2 Marks</b>	<b>L2</b>	<b>CO2</b>

## Part B

### Answer the Questions.

**Total Marks 40M**

<b>6.</b>	<b>a.</b>	Explain firewall biasing approaches (Positive, Negative, Neutral) with real-world examples and discuss their importance in security.	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
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**Or**

<b>7.</b>	<b>a.</b>	Describe different firewall deployment architectures with examples.	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
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<b>8.</b>	<b>a.</b>	Explain phishing, eavesdropping, and social engineering attacks with suitable scenarios.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
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**Or**

<b>9.</b>	<b>a.</b>	Describe web application vulnerabilities (XSS, CSRF, SQL Injection) and suggest two preventive measures for each.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
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<b>10.</b>	<b>a.</b>	Explain secure communication protocols: SSL, TLS and HTTPS with examples.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
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**Or**

<b>11.</b>	<b>a.</b>	Discuss three real-world case studies of cyber attacks or secure protocol use (e.g., SQL Injection on Sony PSN, MySpace XSS worm, HTTPS in Gmail).	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
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<b>12.</b>	<b>a.</b>	What is a Next-Generation Firewall (NGFW)? Explain its working and advantages.	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
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**Or**

<b>13.</b>	<b>a.</b>	Discuss the Clarke-Wilson security model and compare it briefly with Bell-LaPadula and Biba models.	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
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