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# PRESIDENCY UNIVERSITY

## BENGALURU

### Mid - Term Examinations – October 2025

**Date:** 11-10-2025

**Time:** 11.45am to 01.15pm

<b>School:</b> SOIS	<b>Program:</b> BCA	
<b>Course Code:</b> CSA3050	<b>Course Name:</b> Ethical Hacking	
<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>Marks</b>	<b>26</b>	<b>24</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>	Summarize ethical hacking and explain its scope.	<b>2 Marks</b>	<b>L2</b>	<b>CO1</b>
<b>2</b>	Classify the different types of hackers and their roles.	<b>2 Marks</b>	<b>L2</b>	<b>CO1</b>
<b>3</b>	Illustrate the phases of ethical hacking.	<b>2 Marks</b>	<b>L3</b>	<b>CO1</b>
<b>4</b>	Classify the key differences between viruses, worms, and Trojans.	<b>2 Marks</b>	<b>L2</b>	<b>CO2</b>
<b>5</b>	Describe how ransomware functions and its impact on users.	<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 the difference between black-hat, white-hat, and grey-hat hackers.	<b>10 Marks</b>	<b>L2</b>	<b>CO1</b>
	<b>b.</b>	Demonstrate and compare different types of malwares and their effects.	<b>10 Marks</b>	<b>L3</b>	<b>CO1</b>

**Or**

<b>7.</b>	<b>a.</b>	Describe the ethical hacking techniques, approaches to find vulnerabilities in a web application.	<b>10 Marks</b>	<b>L2</b>	<b>CO1</b>
	<b>b.</b>	Illustrate the working of different password cracking techniques.	<b>10 Marks</b>	<b>L3</b>	<b>CO1</b>

<b>8.</b>	<b>a.</b>	Demonstrate how to use antivirus software to detect and remove malware.	<b>10 Marks</b>	<b>L3</b>	<b>CO2</b>
	<b>b.</b>	Explain the working mechanism of a Trojan horse and how it differs from a virus.	<b>10 Marks</b>	<b>L2</b>	<b>CO2</b>

  

<b>9.</b>	<b>a.</b>	Illustrate the lifecycle of a computer virus from infection to execution.	<b>10 Marks</b>	<b>L3</b>	<b>CO2</b>
	<b>b.</b>	Explain how to detect and prevent malware infections also describe what does malware do?	<b>10 Marks</b>	<b>L2</b>	<b>CO2</b>