Darshan Institute of Engineering and Technology
Bachelor of Technology – Semester VI
Mid Semester Examination: I – January 2024

Course Code	: 2101CS632	**Exam Date**	: 19/01/2024
Course Name	: Cyber Security	**Total Marks**	: 30
Time	: 08:15 am to 09:30 am	**Enrollment No.**	:_____

Instructions
1. Attempt **all** the questions.
2. Figure to the right indicate maximum **marks**.
3. Don't do any kind of **rough** work or **calculation** in Question Paper.
4. **Make** suitable assumptions whenever necessary.
5. The text to the right-side of the marks indicates the Bloom's Level **(BL*)** of the question followed by the Course Outcome**(CO).**
   i.e. R: Remembrance, **U:** Understanding, **A:** Application, **N:** Analyze, **E:** Evaluate, **C:** Create.

Course Outcomes (COs)	At the end of this course, students will be able to: CO 1: Describe Cyber Crime and Offense CO 2: Explain on Cyber Attacks and Techniques CO 3: Discuss Cyberlaw and Amendment of IT Act CO 4: Perform system Vulnerability and Web Vulnerability scanner Tools CO 5: Classify the functionality of antivirus and Firewalls

Q. No.		Question	Marks	BL*	CO
Q. 1	(A)	Define Cybersecurity using an example.	3	R	CO1
Q. 1	(B)	Consider a situation where a hacker has attacked an organization's network and stolen key data. Write what are the key elements of Incident Response.	3	U	CO1
		OR			
	(B)	My system has been affected by a virus. Describe the characteristics of the same.	3	U	CO2
Q. 1	(C)	In the terminal, you are currently in the home directory (/home/user). Navigate to the "Documents" directory and create a new file named "report.txt." Then, move this file to the "Downloads" directory. Write the command in sequence.	4	A	CO1
		OR			
	(C)	You are in the home directory. You have a file named "data.txt" in the "Documents" directory. Set the file permissions to allow the owner to read and write, the group to read only, and others to have no permissions.	4	A	CO1
Q. 2	(A)	Define the Techniques used in Cyber Crimes using an example of Ransomware Techniques.	3	R	CO2

Q. 2	(B)	Using an example of a Worm explain the characteristics and stages of a Worm attack.	7	U	CO2
		OR			
	(B)	Using an example of a Trojan explain the characteristics and stages of a Trojan attack.	7	U	CO2
Q. 3	(A)	What are Keyloggers and their types?	3	R	CO2
Q. 3	(B)	Explain the CIA triad using an example.	3	U	CO1
		OR			
	(B)	Explain the IAAA using an example.	3	U	CO1
Q. 3	(C)	You have a file named "log.txt" that contains a list of usernames and their corresponding email addresses. Use a command to display only the unique email addresses from the file, sorted alphabetically.	4	A	CO1
		OR			
	(C)	You need to create a new project directory named "MyProject" and within it, three subdirectories are named "Source," "Docs," and "Data." Inside the "Source" directory, create a new text file named "main.c" using the nano text editor. After creating the file, delete the "Data" subdirectory. Please provide the sequence of commands to achieve these tasks.	4	A	CO1

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