RV COLLEGE OF ENGINEERING®
(An Autonomous Institution affiliated to VTU)
I Semester B. E. Examinations May-2023
Common to all programs
INTRODUCTION TO CYBER SECURITY (ELECTIVE)

Time: 03 Hours   *Maximum Marks: 100*

Instructions to candidates:

1. Answer all questions from Part A. Part A questions should be answered in first three pages of the answer book only.
2. Answer FIVE full questions from Part B. Question number 2 is compulsory. Choose any one full question from 3 or 4, 5 or 6, 7 or 8 and 9 or 10.

PART-A

1	1.1	Name any two Cybercrimes against property.	02
	1.2	Define vulnerability. Give an example.	02
	1.3	_____ and _____ software can block attack vectors.	02
	1.4	The word X is a combination of the words "robot" and "network". It is number of Internet-connected devices, each of which is running as a slave. This can be used to perform DDoS attacks, steal data, and send spam. Identify the word X?	02
	1.5	_____ is the use of deception to manipulate individuals into divulging confidential or personal information that may be used for fraudulent purposes.	02
	1.6	_____ is the world's most popular vulnerability scanner used in companies for checking vulnerabilities in the network.	01
	1.7	In ethical hacking and cyber security, there are _____ types of scanning.	01
	1.8	Who commits cyber-crimes? Give an example.	01
	1.9	_____ is a technique where every possible combination of letters, numbers, and symbols to guess the password.	01
	1.10	Special program which can detect and remove viruses from computer is called _____.	01
	1.11	Use of _____ to ensure security and the confidentiality of data.	01
	1.12	You get a phone call from someone telling you they are from the *IRS*, and they are sending the Police to your house now to arrest you unless you provide a method of payment immediately. What tactic is the caller using?	01
	1.13	You have received a text message from an unknown number that is only five digits long. It doesn't have any text, just a *URL*. What might this be an example of?	01
	1.14	_____ are network devices or software that separates one trusted network from an untrusted network by means of rule-based filtering of network traffic.	01
	1.15	_____ is a cyber-attack intended a redirect a website's traffic to another fake site.	01

PART-B

2	a	Illustrate the history and evolution of Information Security and cyber-security.	08
	b	Explain different classification of Cyber-crimes.	08
3	a	Define passive attack. List and briefly explain the tools used in passive attack.	08
	b	Illustrate the working of Botnets. Explain the different organizational structure of Botnets.	08
		OR	

4	a	Explain the following in detail:
		  i) Shoulder surfing
		  ii) Dumpster driving
			08

	b	Define Attack Vector. List and explain any two types of attack vector.	08
5	a	What are social networks? List and explain the advantages of social networking.	08
	b	Illustrate different Security issues related to social media.	08
		OR	
6	a	What is the purpose of social networking? Explain different types of social networking with an example.	10

	b	Explain the following in detail:
		  i) Social media addiction
		  ii) Cyberbullying
			06

7	a	Define *E*-commerce Security. Explain different types of threats and issues in *E*-commerce.	08
	b	Differentiate between electronic wallets and bank accounts.	08
		OR	
8	a	List and explain the advantages and security measures of *UPI*.	08
	b	Define digital payment fraud. How can it be prevented? Explain different types of digital payments.	08
9	a	How does the attack occur in Wi-Fi environment? Explain different types of attacks and guidelines for securing wireless communications.	08

	b	Explain the following in detail:
		  i) *E*-mail security
		  ii) Anti-virus
			08

		OR	
10	a	List and explain different types of firewalls along with advantages and disadvantages.	08
	b	List and briefly explain digital security tools.	08