
	RV College of Engineering® Department of Computer Science and Engineering CIE - I: SCHEME		
Course & Code	INTRODUCTION TO CYBER SECURITY (CS114BT)		Semester: I
Date :22 NOV 2023	Duration:90 minutes	Max Marks: 50 Marks	Staff :ARA/MH/TP

NOTE: *Answer all the questions*

Sl.no.	Questions		
1.a	Any 5 differences.		
	Parameters	CYBER SECURITY	INFORMATION SECURITY
	Basic Definition	It is the practice of protecting the data from outside the resource on the internet.	It is all about protecting information from unauthorized users, access, and data modification or removal in order to provide confidentiality, integrity, and availability.
	Protect	It is about the ability to protect the use of cyberspace from cyber-attacks.	It deals with the protection of data from any form of threat.
	Scope	Cybersecurity to protect anything in the cyber realm.	Information security is for information irrespective of the realm.
	Threat	Cybersecurity deals with the danger in cyberspace.	Information security deals with the protection of data from any form of threat.
	Attacks	Cybersecurity strikes against Cyber-crimes, cyber frauds, and law enforcement.	Information security strikes against unauthorized access, disclosure modification, and disruption.
	Threats	Primarily deals with digital threats, such as hacking, malware, and phishing	Addresses a wider range of threats, including physical theft, espionage, and human error
1.b	CIA Model includes:		

	 <p>Confidentiality Integrity Availability</p> <p>Explanation of the three parameters.</p>
2.a	<p>Phishing Fraud with explanation : 2m</p> <p>Fraud prevention measures : 4m (Any other measures also to be considered)</p> <ul style="list-style-type: none"> ✓ A change in policy that requires all wire transfer procedures to have oral confirmation from vendors and contractors if there are any changes in payment instructions. ✓ Managers are now required to send emails using two-step account verification procedures. ✓ Employees in the IT, Finance, and Revenue Cycle Departments attend required training on cyber security and cyber fraud risks.
2.b	<p>Any four: Malware, Phishing, Man-in-the-middle (MITM) attack, Distributed denial of service (DDoS), Brute Force, SQL Injection (SQLI), Domain Name System (DNS) attack.</p>
3.a	<p>Benefits of Cyber Security:</p> <ul style="list-style-type: none"> ✓ Cyberattacks and data breach protection for businesses. ✓ Data and network security are both protected. ✓ Unauthorized user access is avoided. ✓ After a breach, there is a faster recovery time. ✓ End-user and endpoint device protection. ✓ Regulatory adherence. ✓ Continuity of operations. ✓ Developers, partners, consumers, stakeholders, and workers have more faith in the company's reputation and trust.
3.b	<p>Explanation of cyber-crimes with example: (Any four) – $1.5 * 4 = 6$</p> <ol style="list-style-type: none"> i. Online gambling ii. Cyber Defamation iii. Cyber stalking iv. Salami attacks v. Email bombing vi. Data diddling
4.a	<p>Discussion of Intellectual Property crime and its prevention.</p>

4.b	<p>Definition : 1m The technique of protecting internet-connected systems such as computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks is known as cybersecurity.</p> <p>Cyber Security Types : 4m</p> <ul style="list-style-type: none"> ✓ Network Security ✓ Application Security ✓ Information or Data Security ✓ Identity management ✓ Operational Security ✓ Mobile Security ✓ Cloud Security ✓ Disaster Recovery and Business Continuity Planning ✓ User Education
5.a	<p>Definition: 1m The area of the legal system that is related to legal informatics and that regulates the electronic exchange of information, e-commerce, software, and information security is known as cyber law, also known as Internet law or cyber law.</p> <p>Following are the major advantages of cyber law: 4m</p> <ul style="list-style-type: none"> ➤ Utilizing the legal framework, the Act provides, businesses can now conduct e-commerce. ➤ In the Act, digital signatures have been given legitimacy and authorization. ➤ It has made it possible for corporate organizations to issue digital signature certificates and operate as certifying authorities. ➤ It paves the way for e-government by enabling the government to publish alerts online. ➤ It allows businesses or organizations to electronically submit any forms, applications, or other documents to any offices, authorities, bodies, or agencies that are owned or managed by the appropriate government using any e-forms that may be specified by that government. ➤ The IT Act also addresses the crucial security concerns that are essential to the success of electronic transaction.
5.b	<p>YES, It also becomes very important to report any incident of financial fraud as it helps to recover your money. The sooner you report an online fraud to authorities and bank, higher the chances of recovering your money.</p> <p>Any real time incident.</p>