

**VIT**Vellore Institute of Technology
affiliated to the University under section 3 of UGC Act, 1956

REG.NO.:

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING
CONTINUOUS ASSESSMENT TEST - I
WINTER SEMESTER 2024-2025

SLOT: B1+TB1

Programme Name & Branch : B.Tech (CSE) & BCE,BCI
Course Code and Course Name : BCSE317L & Information Security
Faculty Name(s) : Common to ALL
Class Number(s) : VL2024250501840 & others
Date of Examination : 27/01/25
Exam Duration : 90 minutes
Maximum Marks: 50

General instruction(s):

Answer All Questions

	Question	M
	Name and narrate the approach of the cybersecurity model that is a foundation for developing security policies to protect data and access. (7) Also, categorise the below-mentioned vulnerabilities whichever meet the above said potentials. (3) Man-in-the-middle attacks Phishing attacks Spyware Unpatched software Weak passwords Excessive user privileges Ransomware SQL injection attacks Distributed denial of service (DDoS) attacks Hardware failures Misconfigurations Software bugs	10
2.	If a user logs in from an unusual location, the system can flag this as a potential security risk and prompt for additional authentication in real-time. Frame the necessary roles played by "Asset Management" & "Security Controls" to maintain the information security baseline for the context and point out attacker strategies involved if weak authentication found in the context.	10
3.	IT infrastructure services are the services that support a company's IT infrastructure, which is the collection of hardware, software, networks, and other resources that enable a company to operate. IT infrastructure services include monitoring, troubleshooting, and optimization of IT systems. And "collaborative business model" refers to a business strategy where multiple entities, like companies, individuals, or communities, work together to achieve shared goals by pooling resources, expertise, and ideas, often leveraging partnerships, networks, and shared platforms to develop products, services, or solutions that are better than what any single entity could achieve alone. To meet the above scenario, we need directory servers that use a flexible schema. They can store a variety of attributes, including user credentials, phone numbers, group associations, and more, in a format that meets the organization's needs. In this case, what authentication model do you prefer to meet modern organization identity	10