

**BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE
(AUTONOMOUS)**

II - M. Tech I-Semester Regular/Supplementary Examinations (BR23), Dec - 2025

PRINCIPLES OF CYBER SECURITY (CSE)

Time: 3 hours

Max. Marks: 75

*Answer any Five Questions One Question for One UNIT
ALL the Question Carry Equal Marks*

UNIT-I		Marks	CO	BL
1.a)	Briefly discuss about objectives of Cyber Security.	7M	CO1	BL2
b)	Write a short notes on i) Authentication ii) Non repudiation	8M	CO1	BL2
OR				
2.a)	Define Cyber Security. Discuss about roles of cyber security.	7M	CO1	BL2
b)	Differentiate between Information Security & Cyber security	8M	CO1	BL4
UNIT-II		Marks	CO	BL
3.a)	Discuss about life cycle management landscape in detail.	7M	CO2	BL2
b)	Define attack. Explain about classes of attacks in detail.	8M	CO2	BL2
OR				
4.a)	Briefly discuss about operational threat environments.	7M	CO2	BL2
b)	Write a short notes on i) Risks ii) Vulnerabilities	8M	CO2	BL2
UNIT-III		Marks	CO	BL
5.a)	Define Incident. Discuss about incident recovery with suitable example.	7M	CO3	BL3
b)	Briefly discuss about the protection of Digital and data assets.	8M	CO3	BL2
OR				
6.a)	Discuss the role of ports and protocols in operational security protection.	7M	CO3	BL2
b)	Discuss about identity and access management in operational security protection.	8M	CO3	BL2
UNIT-IV		Marks	CO	BL
7.a)	Explain how security logs are helpful in vulnerability management.	7M	CO4	BL2
b)	Discuss about Monitoring Tools and appliances in Threat Detection.	8M	CO4	BL2
OR				
8.a)	Briefly discuss about Threat detection and evaluation mechanisms.	7M	CO4	BL2
b)	Discuss about packet capture and analysis in detail.	8M	CO4	BL2
UNIT-V		Marks	CO	BL
9.a)	What is meant by Demilitarized zone in Cyber Security? Explain.	7M	CO5	BL2
b)	Discuss about the components in Metasploit in detail.	8M	CO5	BL2
OR				
10.a)	What is backdoor in cyber security? How it can be prevented.	7M	CO5	BL2
b)	What is Digital Signature? Explain how it works.	8M	CO5	BL2
